) replied to f. 3/13/29

# PERMIT TO CONSTRUCT

₹/	New		Permit No	79–1	
-,	Renewal				
<u> </u>					,
//	Modified				
	<del></del>	PINE HAVEN WATER S	SYSTEM CHLORINA Facility)	ŢION	
•	This	permit hereby authori	izes the applic	:ant:	
,					
		Harwood	Frank		
		(Last)	(Firs	it)	(Middle)
		c/o Timm & Associa	ites	-	
		P.O. Box 726	(6)	0 0	
			(Street or P.	U. BOX)	
				•	
		<u>Gillette</u> (City)	(County)	Wyom	<u>sing 82716</u> (State)
		(010)	,	•	
+0	construct ins	tall, or modify a <u>ch</u>	lorination		
£	William Co.				
fac	ility located	in <u>Section 5, T.50N.</u>	, R.66W. (Legal Descr	ription)	
. in	the County of	Crook		, in	the State of
		rmit shall be effecti	ve for a period	d of _one (1)	years
_		issuance of this perm	* *		,
†r0	m the date of	1320guce of citis beim	TE HOL LO CACCO		
AUT	HORIZED BY:			•	
	•			) =	
	0	000	#	berl 6.	Aindi
(T	Jellam &	. Vala X	1	Director	
	Admin Water Quali	strator ty Division	Wyoming !	Dept. of Enviro	nmental Quality
	•	•			

March 9, 1979
Date of Issuance

"The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or insures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or operational requirements."

C.C. NELSON ENGINEERING P.O. BOX 1141 JACKSON, WYO. 83001 ATTN: MICKEY YAMASHIRO, P.E.

# PERMIT TO CONSTRUCT

// New	·	Permit No. 79-28	
// Renewal			
/X/ Modified	•		
		CONTRACTOR OVEMENTS OF 1979	
		MENT IMPROVEMENTS OF 1979 Facility)	
	This permit hereby author	•	
	THIS DETRICK HER EST GOODS		
	TOWN OF WAMSUTTER	751	(Middle)
	(Last)	(First)	(mroure)
	P.O. BOX 6		
		(Street or P.O. Box)	
	WAMSUTTER, WYO.	82336	
	(City)	(County)	(State)
		WER LINE, LIFT STATION, FORCE	E MAIN AND LAGOONS
to construct,	, install, or should by a <u>y</u>		
facility loca	eted in SEC. 26, T20N R94	(Legal Description)	
		(regal peact the tout)	
in the Count	y ofSWEETWATER	•	in the State of
	is permit shall be effecti	ve for a period of	2 years
		nit not to exceed five (5)	/ears.
from the date	e of issuance of this perio	THE HOLE OF EXCECUTE THE CONT	
AUTHORIZED B	Y:		
	0 0	$\mathcal{L}$	A. di
10 Jacom	L. Jalan	Tober 6.	o wow
	dministrator QualityDivision	Wyoming Dept. of Env	ironmental Quality
	Quality and a rout		

MARCH 15, 1979

Date of Issuance

"The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or insures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or opertional requirements."

# REVIEW OF PLANS AND SPECIFICATIONS

# WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER QUALITY DIVISION 933 MAIN STREET, LANDER, WYOMING 82520

WAMSUTTER SEWAGE TREATMENT IMPROVEMENTS PROJECT:

TOWN OF WAMSUTTER

P.O. BOX 6, WAMSUTTER, WYO. 82336

ARCHITECT OR ENGINEER: MICKEY M. YAMASHIRO, P.E.

NELSON ENGINEERING P.O. BOX 1141

JACKSON, WYO. 83001

WATER QUALITY DIVISION REFERENCE NUMBER: 79-2

REVIEWING ENGINEER:

DAVID W. HILL

DATE OF REVIEW:

JANUARY 30, 1979

ACTION: \_ .

NOT AUTHORIZED

COMMENTS:

LAGOON

- 1. Are channels to be formed in all inlet structures?
- 2. The specifications say that all-stripped areas shall be scarified and recompacted. Does this specification include lagoon bottom scarification and recompaction? It's not clear.
- 3. Will pond-freeze-over disturb or break the PVC siphon tubes?
- An effluent flow measurement structure will be needed in the future before any discharge takes place.
- 5. The check valves and plug valves should be located outside of the wetwell.
- 6. Does a man have to enter the wet well every time the catch basket needs emptying? Provisions should be made to remove and replace the catch basket without a man having to enter the wet well.
- If the catch basket is not emptied regularly, will it back up the flow enough to flood out the Palmer-Bowlus flume?
- In one place, the specifications on standby power indicates that the engine will run on natural gas and in another place it indicates a diesel engine. Which is it?
- 9. What htype of diffuser is used to aerate the force man (if any)?

# NORTH COLLECTION LINE INE

- Deflection testing specifications are needed for the PVC sewer pipe.
- Using skids on the PVC pipe in the casing ten feet apart seems excessive. skids should be spaced closer together to prevent any bowing of the pipe.

# WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION PERMIT TO CONSTRUCT

mailed to L.

/x New		70.0
/// Renewal	Permit No	79 <b>-</b> 3
/ Modified		
DAVIS OIL SANITARY F	FACILITIES (CAMP NO. 1	)
(Name	of Facility)	
This permit hereby	authorizes the app	olicant:
DAVIS OIL COMPANY (Last)  1424 TENTH ST.	(First)	(Middle)
ROCK SPRINGS	WYO	82901
(City) to construct, install, or mo	(State) odify a <u>SEPTIC TANK</u>	(Zip Code) -LEACH FIELD
facility located in <u>SEC36</u>	T24N R97W (Legal Desc	cription)
in the County of SWEETWATER	, in t	the State of Wyoming.
This permit shall be effect:	ive for a period of	f 2 years from
the date of issuance of this	s permit not to exc	ceed five (5) years.
Authorized by:  Administrator Water Quality Division	Director Department Quality	6. Sundin t of Environmental

JANUARY 9, 1979
Date of Issuance
HARRY L. MOORE
P.O. BOX 1633
ROCK SPRINGS, WYO. 82901

# WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION PERMIT TO CONSTRUCT

prailed to 1/15/29

$\overline{X}$ New	
/_/ Renev	val Permit No. 79-4
/_/ Modif	fied
	DAVIS OIL SANITARY FAGILITIES (GAMP NO 2)
	(Name of Facility)
	This permit hereby authorizes the applicant:
	DAVIS OIL COMPANY
	(Last) (First) (Middle)
	1424 TENTH ST.
	(Street or P.O. Box)
	ROCK SPRINGS WYO. 82901
	(City) (State) (Zip Code)
to consti	ruct, install, or modify a SEPTIC TANK - LEACH FLEED
facility	located in SEC 36 T25N R97W (Legal Description)
in the Ci	ounty of <u>SWEETWATER</u> , in the State of Wyoming.
4	mit shall be effective for a period of 2 years from
	of issuance of this permit not to exceed five (5) years.
Authorize Administ	Jobers E. Gundin
Water Qua	ality Division Department of Environmental Quality
JANUARY	9, 1979.
Date of	Issuance
HARRY L. MC P.O. BOX 10 ROCK SPRING	

mailed 1/22/19

# PERMIT TO CONSTRUCT

/ <u>X</u> /	New	,		
//	Renewal		Permit No. 79	9-5
//	Modified			•
		East Amoco A	ddition	
	<del></del>		f Facility)	•
			-	
	This	permit hereby autho	rizes the appli	cant:
				•
		Casper Board of F	Public Utilities	
•		(Last)	(First)	(Middle)
		200 North David		
			(Street or P.	0. Box)
	1.	Casper	Natrona	Wyoming 82601
		(City)	(County)	(State)
to con	nstruct, inst	all, or modify a Wa	ter Distributio	on & Sewage Collection
		City of Cas		
racl1:	ity located i		(Legal Descript	ion)
in the	e County of	Natrona		_, in the State of
		rmit shall be effect	ive for a perio	od of 2 years
-			•	
from	the date of	issuance of this per	mit not to exce	eed five (5) years.
	•			
			Authorized by	•
				- /
	0.			Elundi
<u>( ) ) (</u>	Diam I !	Jala D	Bovers	Director
Wate	Administrat er Quality Di	vision	Wyoming Dept.	of Environmental Quality
			•	
	_			
	January 1	10, 1979:		

Date of Issuance
This permit does not supercede the requirements for obtaining a Septic Tank
Permit from Natrona County Health Department.

# FH 2/13/19

# PERMIT TO CONSTRUCT

/ <u>x</u> _/	New	
//	Renewal	Permit No. 79-6
//	Modified	
		K-Mart Mountain Plaza Addition
	<del></del>	(Name of Facility)
		This permit hereby authorizes the applicant:
		Casper Board of Public Utilities (Last) (First) (Middle)
		200 North David (Street or P.O. Box)
		Casper Natrona Wyoming 82601 (City) (County) (State)
to 🥃	onstruct, ins	tall, or modify a Water Distribution & Sewage Collection 7
faci	lity located	in City of Casper
	e e	(Legal Description)
in t	he County of	Natrona, in the State of
Wyom	ing. This po	ermit shall be effective for a period of years
from	the date of	issuance of this permit not to exceed five (5) years.
AUTH	ORIZED BY:	
<u>u</u>		Strator istrator ity Division  Director Wyoming Dept. of Environmental Quality
	January 2 Date of	9, 1979 Issuance

"The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or insures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or operational requirements."

This permit <u>does not</u> supercede the requirements for obtaining a Septic Tank Permit from Natrona County Health Department.

Books 7-79

# PERMIT TO CONSTRUCT

/ <u>X</u> /	New	·	Permit No	79-7RR	·
//	Renewal.		•	4	
/ <u>·</u> /	Modified				
		Saratoga Water T	reatment Plant of Facility)		
	This	permit hereby autho		·ant•	
		Davis,	Howard		.C., Mayor
	-	(Last)	(Firs		(Middle)
•		Town of Saratoga P.O. Box 486			
		· · · · · · · · · · · · · · · · · · ·	(Street or P.	0. Box)	The state of the s
		Saratoga,	Carbon,	<b>M</b> ,	Y 82331
	<del>-</del>	(City)	(County)	<del></del>	(State)
		all, or modify a		ter system	
faci	lity located in	Sec. 11, T17	(Legal Descr	iption)	<del></del>
in t	he County of	Carbon	(30,000)		the State of
					ne state of
	• **	nit shall be effect	. "		years
from	the date of is	ssuance of this per	mit not to excee	d five (5) year	E. SIJ
AUTH(	ORIZED BY:	WILLIAM L. GARLAN P.E. # 1479	NEE A	<b>5</b> 0	*\ \*\
(U)	Administ Water Quality	rator F OF WYOM	Wyoming De	Director ept. of Environ	mental Quality
	July 26, Date of Is				

<sup>&</sup>quot;The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or insures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or opertional requirements."

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

Town of Saratoga, Backwash Wastewater System, Carbon Co. PROJECT:

Western Engineers & Architects, 501 N. Sun Dr., ARCHITECT OR ENGINEER:

Casper, WY 82601

WATER QUALITY DIVISION REFERENCE MUMBER #/ 79-7R

shert H. Finther Robert H. Pinther, P.E., M.S. REVIEWING ENGINEER:

May 18, 1979 DATE OF REVIEW:

NOT AUTHORIZED FOR CONSTRUCTION ACTION:

COMMENTS:

In accordance with our telephone conversation of May 18, 1979 with Mr. Barry Venn of Western Engineers & Architects, revisions to the plans will be submitted to this Division convering the following required changes in connection with the ventilation system for the manhole lift station:

- Provide for the introduction of fresh air into the lift station rather a. than exhausting air.
- b. Redesign the wiring so that the switch which controls the ventilating fan also controls the only source of power for lighting the wet well.

Please submit an application for a Permit to Construct on the above referenced project.

\$0000 mg . 23-75

mailed 2-1-79

# REVIEW OF PLANS AND SPECIFICATIONS

# WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: Town of Saratoga, Backwash Water Waste System, Saratoga, WY 82331

Carbon County

ARCHITECT OR ENGINEER:

Western Engineers & Architects, 501 N. Sun Drive,

Casper, WY 82601

WATER QUALITY DIVISION REFERENCE NUMBER: 79-7

REVIEWING ENGINEER:

Robert H. Pinther, P.E., M.E.; Jake Strohman, P.E.

DATE OF REVIEW: 1/15/79

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

#### COMMENTS:

- 1. The plans shall bear the seal or signature of the designing engineer who is a registered engineer in the State of Wyoming.
- 2. The lift station shall not be subject to flooding.
- 3. The electrical system & components in the manhole lift station shall comply with the National Electrical Code requirements for Class I, Division I locations.
- 4. Remove the electrical outlet from the manhole lift station.
- 5. In lieu of providing adequate fresh air ventilation for the manhole lift station the following shall be accomplished:
  - a. Provide means for disconnecting the pump and removing without entering the wet well.
  - b. Remove all valves from the wet well and re-locate where they will be accessible.
- 6. Provide an alarm system which will be activated in case of lift station power failure, pump failure, or any other cause of pump station malfunction.
- 7. Provide a second pump for installation in case of failure of the lift station pump in place.
- 8. To assure a cleansing velocity of 2 feet per second the diameter of the force main should be limited to 3 inches.
- 9. It is recommended that a flap gate be provided at the discharge end of the force main.

Book Mailed 4-13-79

# PERMIT TO CONSTRUCT

/ <u>xx</u> /	New		
//	Renewal	Permit No.	79-8
<u> </u>	Modified		·
11	110011100	Hansen Bldg: Specialties	· · · · · · · · · · · · · · · · · · ·
	_	(Name of Facility)	
		his permit hereby authorizes the ap	oplicant:
		Spiva Backhoe	•
		(Last) (First)	(Middle)
		P. O. Box 122	
		(Street or F	P.O. Box)
		Mills Natrona	Wyoming 82644
		(City) (County)	(State)
to co	onstruct, <sup>-</sup>	all, or modify a <u>Commercial Sub</u>	surface <u>Disposal</u>
		n Section 32, T34N, R79W	
Idel	illy locate	(Legal Descr	iption)
in t	he County (	Natrona	, in the State of
Wyom	ing. This	rmit shall be effective for a period	d of 3 years
from	the date	issuance of this permit not to excee	ed five (5) years.
			150
AUTH	ORIZED BY:		
	· · · · · · · · · · · · · · · · · · ·		6/
(e	) elian	L. Cana Tobert	6 funder
		strator A ty Division Wyoming D	Director ept. of Environmental Quality
	water qu	Ly DIVISION My Ching -	
	April	1979	
		Issuance	

"The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or insures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or operational requirements."

This permit  $\underline{\text{does not}}$  supercede the requirements for obtaining a Septic Tank Permit from Natrona County Health Department.

mailed 3/21/19

# PERMIT TO CONSTRUCT

/ <u>x</u> /	New				
//	Renewal		Permit No7	9_9	
//	Modified				
		Pacific	Steel		
		(Name	of Facility)		
	-	This permit hereby aut	thorizes the applica	ant:	
		Spiva Backhoe			
		(Last)	(First)	(Mid	dle)
		Dempsey Acres			
			(Street or P.O. E	Box)	
	•	Casper	Natrona	Wyoming	82601
		(City)	(County)	(Sta	te)
to c	onstruct, ins	tall, or modify a	Small Waste System	energy	
		in Section 34, T3			
raci	Trey rocated		(Legal Description	1)	
in t	he County of	Natrona		, in the St	ate of
Wyom	ing. This pe	rmit shall be effectiv	ve for a period of _	2	years
from	the date of	issuance of this permi	it not to exceed fiv	ve (5) years.	
AUTH	ORIZED BY:				
				0	
, ,	`nn · D	000	Lovers	E Sun	den
ك	Admini	strator	Good	Director	
		ty <b>D</b> ivision	Wyoming Dept. o	of Environmen	tal Quality
	a,	•		•	
	March 16,	1979 Tesuance			

"The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or insures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or operational requirements."

This permit <u>does not</u> supercede the requirements for obtaining a Septic Tank Permit from Natrona County Health Department.

mailed 1/22/29

# PERMIT TO CONSTRUCT

/ <u>x</u> /	New			
//	Renewal		Permit No	79-10
<del></del> /	Modified			·
·				•
	^	5 17		
		Rolling Hills (Name	s <u>Estates</u> of Facility)	· <del></del>
	m .! -		hariana tha appli	cont.
	This	permit hereby aut	HOLIZER THE APPLI	Cane.
		Hopkins	D. (First)	M. (Middle)
		(Last)	(First)	(Middle)
		216 East 17th		
	-		(Street or P.	.O. Box)
	-	Cheyenne	Laramie	Wyoming 82001
	•	(City)	(County)	(State)
		sall, or modify a Section 33,		
			•	
in th	e County of _	Laramie		, in the State of
Wyomi	ng. This per	mit shall be effe	ective for a perio	od of 2 years
from	the date of i	ssuance of this p	permit not to exce	eed five (5) years.
				•
			Authorized by	:
	0 (	$\mathcal{O}_{\mathcal{O}}$	Alexa	E /
<u>(I)</u>	Olean J	Jala Q	_	Director Director
Wat	Administrat er Quality Di	orn vivsion	Wyoming Dept.	of Environmental Quality
., 0				•
	Janua	rv 0 1070		

Date of Issuance

Report de No

79-11

ED HERSCHLER

# Department of Environmental Quality

Water Quality Division

3144

TELEPHONE 307-332-80XXX

LANDER, WYOMING 82520

MEMORANDUM

TO:

933 MAIN

BILL GARLAND

FROM:

DOUG CRAIG, DE. ENVIRONMENTAL ENGINEER

SUBJECT:

THAYNE WASTEWATER TREATMENT PLANT

DATE:

FEBRUARY 21, 1979.

The Thayne Wastewater Treatment Plant design has been thoroughly reviewed and is now in an approvable form. The only outstanding issue left to be resolved is the solids management plan. This plan is presently being reviewed by the Solids Waste Division.

Their findings will be conveyed to us at the completion of the review.

c.c. Don Armstrong,Tudor Engineering,450 S. Federal Blvd.,Riverton, Wyo. 82501.

### REVIEW OF PLANS AND SPECIFICATIONS

# WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER QUALITY DIVISION 933 MAIN STREET, LANDER, WYOMING 82520

PROJECT:

THAYNE WASTEWATER TREATMENT PLANT

ARCHITECT OR ENGINEER: TUDOR ENGINEERING

450 SOUTH FEDERAL BOULEVARD

RIVERTON, WYO. 82501

WATER QUALITY DIVISION REFERENCE NUMBER:

79-11

REVIEWING ENGINEER:

DOUG CRAIG DOC.

DATE OF REVIEW:

JANUARY 23, 1979

ACTION:

NOT AUTHORIZED FOR CONSTRUCTION

#### COMMENTS:

- 1. The equilization basin doesn't appear to have a by-pass. How will maintenance on the aerators be performed?
- Please clarify the purpose of the level control switches in the intake pump station.
- 3. Hose-gate connections on the sludge lines may eliminate some operational problems.
- 4. A 90% suspended solids removal in the primary and secondary clarifiers as indicated in the calculations seems quite high. However, due to the effluent requirements, this is probably unimportant.
- 5. Why such a limited drawdown in the aerobic digestor?
- 6. Please supply the manufacturer's information on the digestor diffusors.
- 7. The blowers specified for the digestor are to have a capacity of 700 scfm @ 13 ft w.c.. The storage pond air requirements are for 95 cfm @ 17 ft. w.c.. Are the same blowers used for both installations? The head specifications for the three 400 scfm blowers is 13 ft.
- 8. Are all lines protected from freezing conditions? This is difficult to determine in some cases from the plans.
- 9. Are hose bibs provided at convenient locations for washdown of facilities?
- 10. Provide details of infiltration basin inlet structure and piping.
- 11. Has any work been conducted to ensure that the heat loss through the process is such that freezing will not inhibit infiltration?
- 12. What is your status on monitoring wells?

THAYNE WASTEWATER TREATMENT PLANT REVIEW

TO: TUDOR ENGINEERING - RIVERTON

FROM: DOUG CRAIG JANUARY 23, 1979

NOT AUTHORIZED FOR CONSTRUCTION

- 2 -

- 13. We are awaiting your sludge management information
- 14. What lab facilities are to be provided?
- 15. An O & M manual is required.
- 16. This plant is designed for a BOD5 loading of 2025 lb/day. The permit is contingent upon this loading and any additional load will have to be eliminated.

mülel 3/19/79

# PERMIT TO CONSTRUCT

/ <u>X</u> /	New		Permit No79-1	2R 🚶
//	Renewal			
//	Modified			·
	This	(Name o	gy Technology Center { of Facility) orizes the applicant:	·
		Laramie Energy Teo (Last)	chnology Center-Dept. of (First)	Energy (Middle)
٠		P. O. Box 3395 - t	University Station	
			(Street or P.O. Box)	
		Laramie	•	Wyoming 82071
		(City)	(County)	(State)
to co	nstruct. inst	all or modify a	Industrial Evaporative (	•
		n Section 29, T2	The Second State of Second Sec	
14611	inty focuted i		(Legal Description)	
in th	ne County of _	Carbon		, in the State of
Wyomi	ing. This per	mit shall be effect	ive for a period of	years
	the date of i	ssuance of this per	nit not to exceed five (	5) years.
رنگ.	Oboem J. Adminis Water Qualit			ector Environmental Quality
	March 7, 1979	0.0451133		

<sup>&</sup>quot;The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or insures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or opertional requirements."

product 1/17/29

# REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
State Office Building
Cheyenne, Wyoming 82002

PROJECT: 60' diameter evaporation tank for storage of wastewater at

LETC Hanna Research Site

ARCHITECT OR ENGINEER: John B. Lund, J. T. Banner & Assoc.

309 4th Street, P. O. Box 550, Laramie, WY 82070

WATER QUALITY DIVISION REFERENCE NUMBER:

79-12

REVIEWING ENGINEER:

Frank Harmon, P.E., Jake Strohman, P.E.

DATE OF REVIEW: Jamus

January 11, 1979.

ACTION:

NOT AUTHORIZED FOR CONSTRUCTION PENDING RECEIPT OF ADDITIONAL UNDERMENTIONED ITEMS IN "COMMENTS":

### COMMENTS:

- 1. The 8 inch sand layer needs to be "keyed" into the normal ground in the area in order to prevent lateral slippage of the sand layer and tank.
- 2. The bolted steel tank side wall is required to meet the requirements of the AWWA Specifications D199-67.
- 3. Provide manufacturer's procedures or instructions on how the 36 mil "hypolon" liner is to be laid or applied to the bottom and side walls of the tank respectively. Special emphasis to be made on the point of interfacial meeting between the bottom edge of the steel tank and the sand bottom.
- 4. Additional information is required for review on the Vinyl Nitro ("permeation barrier") to be applied below 8" sand layer. Installation or application procedure should be included.
- 5. As an oil leak or oil spill contingency plan a berm shall be provided around the tank beyond the sand layer. This berm should encompass a pond or "moat" which should be capable of handling at least  $\frac{1}{2}$  the stored volume of wastewater is 50,000 gallons.

In the event of a leak the remaining wastewater may be collected and stored in 50 gallon barrels. This will require an adequately sized pump and handle the remaining 50,000 gallons of wastewater in a reasonable amount of time. Provide the specifications for such a pump and willingness to provide the 10,000 barrels needed under such an oil leak or oil spill contingency plan. When an oil spill contingency plan is prepared, please send a copy.

# WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION PERMIT TO CONSTRUCT

mailed to L. 1/29/29

/// New			79-13 CROSS REF. 76-269R
$\sqrt{x}$ Rene	ewal	Permit	No
<u>/</u> / Modi	fied		
	IMPERIAL HEIGH	TS ADDITION	
	(Na	ame of Facility)	
	This permit here	eby authorizes th	ne applicant:
	UPLAND INDUSTR	.IES	
	(Last)	(First)	(Middle)
	110 NORTH FOUR	TEENTH ST.	SUITE 1000
		(Street or I	P.O. Box)
	03.51.77.1	NEDD LOW L	(07.00
	OMAHA (City)	NEBRASKA (State)	68102 (Zip Code)
	(CICY)	(5000)	(21p ccac)
to const	ruct, install, or	r modify aW	ATER AND SEWER SYSTEM
facility	v located in SEC35	T18N R1	07W L Description)
in the (	County of SWEETWA	TER	, in the State of Wyoming.
This per	cmit shall be effe	ective for a peri	iod of 2 years from
the date	e of issuance of	this permit not +	co exceed five (5) years.
Authoriz	ien Dalas	Lob	err E. Lundin
Administ Water Qı	rator () ality Division	Direc Depai Quali	tment of Environmental
JANUARY :	22, 1979 Issuance		
c.c.PACIFIC 1 920 S.W. PORTLAND ATTN: CHI	MICHAEL BRENNEMAN, F POWER & LIGHT COMPANY SIXTH AVE. , OREGON, 97204 ESTER E. ELSTON, P.E. R SYSTEMS ENGINEER	Ţ	

mailed 1/22/19

# PERMIT TO CONSTRUCT

/ <u>x</u> /	New						
//	Renewal	·	Permit No	79-14			
//	Modified						
		Gravson	Building ?	,			
(Name of Facility)							
	This	permit hereby author	orizes the appli	icant:			
		Hones	L.	Α			
		(Last)	(First)	(Middle)			
	Box 1519 (Street or P.O. Box)						
		Casper	Natrona	Wyoming 82601			
		(City)	(County)	(State)			
		all, or modify a		m @			
	-		(Legal Descript	cion)			
in the	County of _	Natrona		, in the State of			
Wyomin	ng. This per	rmit shall be effect	tive for a perio	od of <u>2</u> years			
from t	the date of i	issuance of this per	rmit not to exce	eed five (5) years.			
		•	Authorized by	:			
W)	Olian P ( Administrat	Jaila D	Lovers	E. Sundin Director			
Wate	r Quality Di		Wyoming Dept.	of Environmental Quality			

January 9, 1979

Date of Issuance
This permit does not supercede the requirements for obtaining a Septic Tank
Permit from Natrona County Health Department.

# REVIEW OF PLANS AND SPECIFICATIONS

# WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: Grayson Building Septic System, Casper, WY 82601, Natrona Co.

ARCHITECT OR ENGINEER: L. A. Hones, Box 1519, Casper, WY 82601

WATER QUALITY DIVISION REFERENCE NUMBER: 79-14

REVIEWING ENGINEER: Robert H. Pinther, P.E., M.S.; Jake Strohman, P.E.

DATE OF REVIEW: 1/9/79

ACTION: CONSTRUCTION AUTHORIZED

### **COMMENTS:**

The slope of the sewer from the building to the septic tank should be 2%.

# PERMIT TO CONSTRUCT

/ <u>x</u> /	New			
//	Renewal		Permit No.	9-115
//	Modified			
			re Services 🛊	
			of Facility)	
	This	permit hereby auth	orizes the applic	eant:
		Burd	W.	Ε.
		(Last)	(First)	(Middle)
		1410 Mariposa		
	•		(Street or P.0	O. Box)
		Casper	Natrona	Wyoming 82601
		(City)	(County)	(State)
to con	struct, inst	all, or modify a _	Septic Syste	m
4		n Section 6, T33		
IdCIII	.Ly 10calou 1		(Legal Descript	ion)
in the	County of _	Natrona		_, in the State of
Wyomin	ng. This per	mit shall be effec	tive for a period	d of2years
from t	he date of i	ssuance of this pe	ermit not to exce	ed five (5) years.
	•			
			Authorized by:	
l o 0 (	no.: { (	0-0-0	Lovere	6. Sundin
	Administrat		- Livering Dont	Director
Wate	r Quality Di	VIS <b>Y</b> ON	wyoming Dept.	of Environmental Quality

January 9, 1979

Date of Issuance
This permit does not supercede the requirements for obtaining a Septic Tank Permit from Natrona County Health Department.

# REVIEW OF PLANS AND SPECIFICATIONS

# WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: Septic System for Go-Wire Services, Casper, WY 82601, Natrona Co.

ARCHITECT OR ENGINEER: W. E. Burd, 1410 Mariposa, Casper, WY 82601

WATER QUALITY DIVISION REFERENCE NUMBER: 79-15

REVIEWING ENGINEER: Robert H. Pinther, P.E., M.S.; Jake Strohman, P.E.

DATE OF REVIEW: 1/9/79

ACTION: CONSTRUCTION AUTHORIZED

#### COMMENTS:

- 1. To facilitate trapping and retention of oil and grease the septic tank serving the "grey water" system the outlet baffle of the septic tank should extend at least 3 feet below the water level in the tank.
- 2. The slope of the sewers from the building to the septic tank should be 2%.

mailed 1/22/79

# PERMIT TO CONSTRUCT

<b>a</b> 1	Permit No	79-16			
ied		·			
	•	•			
Finn M	IcCarthy System				
This permit hereby	authorizes the applic	cant:			
McCarthy					
(Last)	(First)	(Middle)			
1501 Nottin					
	(Street or P.O. Box)				
Casper		Wyoming 82601			
(City)	(County)	(State)			
, install, or modify	a Subsurface Di	sposal 🦪			
Ć+-a- 07					
	(Legal Descript:	ion)			
y ofNatrona		_, in the State of			
is permit shall be e	ffective for a perio	d of 2 years			
	•				
		•			
	Authorized by:				
d. Jala D	Povers	E. Sundin			
istrator ity Division	Wyoming Dept.	of Environmental Quality			
uary 9, 1979 Date of Issuance					
	Finn M (No.  This permit hereby  McCarthy (Last)  1501 Nottin  Casper (City)  , install, or modify ated in Section 27  y of Natrona is permit shall be e e of issuance of thi  ity Division  uary 9, 1979	Finn McCarthy System (Name of Facility)  This permit hereby authorizes the application of the permit hereby authorizes the app			

This permit  $\frac{\text{does not}}{\text{Natrona}}$  supercede the requirements for obtaining a Septic Tank Permit from Natrona County Health Department.



ED HERSCHLER GOVERNOR

# Department of Environmental Quality Water Quality Division

1111 EAST LINCOLNWAY

CHEYENNE, WYOMING 82002

TELEPHONE 307 777-7781

March 22, 1984

Mr. Bob Norton P.O. Box 1599 Jackson, WY 83001

Dear Mr. Norton

On March 13, 1984, a status letter was sent to you concerning a permit to construct, reference number (9-17), facility name Country Estates. The application is considered inactive and is being returned under the assumption that the applicant does not wish to proceed with the permit to construct process.

This project has <u>not</u> been permitted. Construction of this facility without a permit is a violation of the Environmental Quality Act and punishable with fines not to exceed \$10,000 per day of violation. If this project has already been constructed, it is your responsibility to immediately contact this office for further instruction. If you wish to reconsider construction of this facility, then application procedures pursuant to Chapter III, Water Quality Rules & Regulations, must be followed.

Sincerely,

LeRøy C. Feusner, P.E.

Southeast District Supervisor

Water Quality Division

LCF/nc

cc: Town of Glenrock Glenrock, WY 82637



# Department of Environmental Quality Water Quality Division

1111 EAST LINCOLNWAY

CHEYENNE, WYOMING 82002

TELEPHONE 307 777-7781.

March 13, 1984

Town of Glenrock Glenrock, WY 82637

Gentlemen:

Our records indicate your application for a permit to construct has not been resubmitted to this office for review and authorization. The specific information for your proposed project are:

Facility name:

DEO/WOD Reference Number:

Engineering Consultant:

DEQ/WQD Reviewing Engineer: Date of DEQ/WQD Review: Country Estates

79-17

C. K. Wolz, Wolz & Associates

Robert Pinther

February 28, 1979

Please indicate below the status of your application and return this form to our office:

<u>//</u>	The application cancelled.	will not be resubm	itted as th	e proposed	project	has	been
<u>//</u>	The application	will be resubmitte	d within 30	days.		1.1	."
		s been constructed, and specifications					con-
	Other remarks _						
dephi t	re converse	tion, 21 More	284) Proper	eject Consei	elled a	279. WY.	-17,

You are reminded that the construction, installation, or modification of any sewerage system, treatment works, disposal system, or other facility capable of causing or constributing to pollution, or public water supply system without a Permit to Construct is a violation of Wyoming State Statutes. Unless the Water Quality Division reviewing engineer receives this information within 15 days of the receipt of this letter, follow-up action will be taken.

Sincerely,

LeRoy C. Feusner, P.E.

Southeast District Supervisor

Water Quality Division

cc: C. K. Wolz
Wolz & Associates
933 West 14th Street
Casper, WY 82601



ED HERSCHLER GOVERNOR

# Department of Environmental Quality Water Quality Division

1111 EAST LINCOLNWAY

CHEYENNE, WYOMING 82002

TELEPHONE 307 777-7781

March 13, 1984

Town of Glenrock Glenrock, WY 82637

Gentlemen:

Our records indicate your application for a permit to construct has not been resubmitted to this office for review and authorization. The specific information for your proposed project are:

Facility name:

DEQ/WQD Reference Number:

Engineering Consultant:

DEQ/WQD Reviewing Engineer:

Date of DEQ/WQD Review:

Country Estates

79-17

C. K. Wolz, Wolz & Associates

Robert Pinther

February 28, 1979

Please indicate below the status of your application and return this form to our office:

/	The application will not be resubmitted as the proposed cancelled.	project	has	been
<u>/_/</u>	The application will be resubmitted within 30 days.			
	The facility has been constructed, or is under construct struction plans and specifications will be submitted wit	ion. As hin 30 da	built ys.	con-
<u>//</u>	Other remarks			· ·

You are reminded that the construction, installation, or modification of any sewerage system, treatment works, disposal system, or other facility capable of causing or constributing to pollution, or public water supply system without a Permit to Construct is a violation of Wyoming State Statutes. Unless the Water Quality Division reviewing engineer receives this information within 15 days of the receipt of this letter, follow-up action will be taken.

Sincerely,

LeRoy C. Feusner, P.E.

Southeast District Supervisor

Water Quality Division

cc: C. K. Wolz
Wolz & Associates
933 West 14th Street
Casper, WY 82601

Mailed 3/14/19

# REVIEW OF PLANS AND SPECIFICATIONS

# WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: Country Estates Water & Sewer Plans, Glenrock, WY, Converse County

ARCHITECT OR ENGINEER: Wolz & Assoc., P. O. Box 322, Casper, WY 82601

WATER QUALITY DIVISION REFERENCE NUMBER:

REVIEWING ENGINEER: Robert H. Pinther, M.S., P.E., Jake Strohman, P.E.

DATE OF REVIEW: 2/28/79

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

# Water Main Extensions

- 1. Provide a minimum cover of 5 feet over water mains to prevent freezing.
- 2. Pressure and leakage test proceedures shall incorporate the provisions Section 4 Hydrostatic Testing of AWWA Standard C600-77. The pressure test shall be of at least 2 hours duration.
- 3. All visible leaks shall be repaired regardless of the amount of leakage.
- 4. The allowable leakabe for 6 inch ductile iron pipe shall not exceed 0.45 gallons per hour per 1000 feet of pipeline at the 100 psi specified. (See Table 7 of AWWA Standard C600-77).
- 5. Provide a legend which identifies the symbol for valves, fire hydrants, etc.
- 6. Valves in the service area, present or future, should be located at not more than one block or 800 foot intervals.
- 7. Fire hydrants should be spaced at 350 to 600 feet intervals depending on the build-up of the area being served.
- 8. The pressure reducing valve vault shall be drained to the surface of the ground where it is not subject to flooding by surface water or to an absorpition pit underground.

### Sewer Main Extensions

Specify that the maximum vertical deflection of any sewer pipe due to ovalation shall not exceed 5% of the internal pipe diameter.

### Lift Station

- 1. The pumps should be preceded by readily accessible bar racks or baskets with clear openings not exceeding  $2\frac{1}{2}$  inches unless special devices are installed to protect the pumps from clogging or damage.
- 2. The submersible pumps shall be capable of unsubmerged operation without damage or reduction of service capability, or positive provision shall be made to assure submergence, e.g., backup controls.
- 3. The wet well floor shall have a minimum slope of 1 to 1 to a hopper bottom...
- 4. The pumps shall be resistant to corrosion by sewage and sewer gases.
- 5. All control valves on the discharge line from each pump shall be placed in a convenient location outside the wet well and be suitably protected from weather & vandalism.
- 6. In lieu of adequate ventilation of the wet well by the introduction of fresh air by mechanical means provision shall be made for servicing wet well screens or bar racks without entering the wet well.
- 7. An audio-visual alarm device shall be installed for external observation. It shall be activated in cases of power failure, pump failure or any other cause of pump station malfunction.
- 8. Each pump shall have sufficient capacity to maintain a cleansing velocity of at least 2 feet per second in the 4 inch force main.

C.C. TOWN OF MOUNTAIN VIEW BOX 249 MOUNTAIN VIEW, WYO. 82939

ROCKY MOUNTAIN ENGINEERING & SURVEYING INC. P.O. BOX 805

EVANSTON, WYO. 82930 ATTN: DALE E. PETERSON P.E.

# PERMIT TO CONSTRUCT 79-18RR Permit No. New Renewal Modified MOUNTAIN VIEW SUBDIVISION SEWER & WATER (Name of Facility) This permit hereby authorizes the applicant: MOUNTAIN VIEW SUBDIVISION (Last) (First) (Middle) P.O. BOX 342 (Street or P.O. Box) COALVILLE, UTAH, 84107 (City) (County) (State) to construct, install, or modify a WATER DISTRIBUTION AND WASTEWATER facility located in SEC 13 & 24, T15N R115W (Legal Description) in the County of UINTA , in the State of Wyoming. This permit shall be effective for a period of 2 years from the date of issuance of this permit not to exceed five (5) years. AUTHORIZED BY: Water Quality (D) ivision Wyoming Dept. of Environmental Quality MARCH 22, 1979

"The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or insures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or opertional requirements."

Date of Issuance

TO TO

### REVIEW OF PLANS AND SPECIFICATIONS

# WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER QUALITY DIVISION 933 MAIN STREET, LANDER, WYOMING, 82520.

(307) 332-3144

PROJECT:

MOUNTAIN VIEW SUBDIVISION WATER & SEWER

SEC. 13 & 14, T. 15 N., R115W

UINTA COUNTY, MOUNTAIN VIEW, WYO.

ENGINEER:

ROCKY MOUNTAIN ENGINEERING & SURVEYING

P.O. BOX 805

EVANSTON, WYO. 82930 - ATTN: DALE E. PETERSON, P.E.

OWNER:

MOUNTAIN VIEW SUBDIVISION

P.O. BOX 342

COALVILLE, UTAH, 84107

WATER QUALITY DIVISION REFERENCE NUMBER: 79-18R

REVIEWING ENGINEER:

DAVID W. HILL

DATE OF REVIEW:

MARCH 9, 1979

ACTION:

NOT AUTHORIZED.

COMMENTS:

# WATER AND SEWER LINE

1. Spacing skids ten feet apart in the casings is too far apart. It could result in bowing pipe and joints pulling apart. The skids should be spaced closer together.

### LIFT STATIONS

- 2. As per our phone conversation of March 8, we need more information on procedures during power outages.
- 3. More information is needed to insure that the lift stations will not be flooded out during flooding of the Smith Fork.
- 4. A gate valve should be placed on each individual discharge line from the wet well.
- 5. The submersible pump removal system should extend to the surface. Under the present design using a coned manhole, it would be extremely difficult to remove the pumps. It would also be hazardous for the maintenance people.

J& Q

# REVIEW OF PLANS AND SPECIFICATIONS

# WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER QUALITY DIVISION 933 MAIN STREET, LANDER, WYOMING 82520

PROJECT: MOUNTAIN VIEW SUBDIVISION

ARCHITECT OR ENGINEER: ROCKY MOUNTAIN ENGINEERING & SURVEYING

P.O. BOX 805

EVANSTON, WYO. 82930

WATER QUALITY DIVISION REFERENCE NUMBER: 79-18

111311 Q012221 2212101 122312102 1011211. 73

REVIEWING ENGINEER: DAVID W. HILL

DATE OF REVIEW: JANUARY 29, 1979

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS: GENERAL

1. Please have owner or owners designated representative fill out and submit "Application for Permit to Construct".

## SEWER SYSTEM

## COLLECTION LINES

- 2. A deflection testing specification is needed for PVC pipe.
- 3. Infiltration exfiltration tests shall be performed.
- 4. Because of possible high groundwater, branch wyes should be used for all service connections rather than saddles.
- 5. Unless it is absolutely impossible, all water and sewer mains shall be kept at least ten feet from each other except at crossings. Your specifications don't reflect this.
- 6. More details are needed on the river crossing (i.e. depth of bury, protection over casing, spacing of skids, etc.).
- 7. Discuss the possibilities of the sewer line floating in the casing. What method or steps will be taken to prevent this?

### LIFT STATIONS

- 1. The Engineering Report looks good, however, nowhere could I determine expected average flow or peak flow to average flow factors used in design.
- 2. Address emergency power or a dual source of power. Indicate power outages in area over last several years, storage capacity in collection lines, etc.

REVIEW MOUNTAIN VIEW SUBDIVISION 79-18 FROM: DAVID W. HILL JANUARY 29, 1979

- 2 -

- 3. One-to-one fillets should be used in wetwells to stop solids deposition.
- 4. Is a drain or sump needed in the valve pits?
- 5. Are the lift stations protected from surface runoff?

### WATER SYSTEM

- 1. Indicate pressure rating of PVC pipe.
- 2. Indicate all valve locations on plans.
- 3. More details are needed on the river crossing (i.e. depth of bury, protection over casing, spacing of skids, etc.)
- 4. For the river crossing, a manhole is needed for the upstream valve. Permanent taps are needed on each side of this upstream valve to allow insertion of a small meter for testing to determine leakage or for sampling.

# REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
30 East Grinnell
Sheridan, Wyoming 82801

PROJECT:

Collins Heights Industrial Park Subdivision

orage and s

Wayne Haug

ARCHITECT OR ENGINEER:

Scott Engineering Co.

P.O. Box 2097

Gillette, WY 82716

WATER QUALITY DIVISION REFERENCE NUMBER:

79-19

REVIEWING ENGINEER:

Dan H. Kim, Tom Mueller

DATE OF REVIEW:

February 15, 1979.

ACTION:

Not Authorized for Construction

#### COMMENTS:

- 1. The adequacy of the existing water system for the new subdivision and the design criteria of the system should be addressed, particularly including:
  - a. Are the 18 lots total development in the Industrial Park Subdivision? Will there be additional development in the future?
  - b. Is the subdivision composed of residential houses? If any industries are to be included, provide detailed information concerning the type of business, water demand, etc.
  - c. Design criteria of the new 83,500 gallon tank.
- 2. It is the Department's policy that all water supplies are required to have a provision for disinfection. Please provide details.
- 3. Please discuss how the water system is controlled. Are the booster pump and the new water storage interconnected? If not, why not?

Now that the existing control system in the underground storage is to be moved to the new tank, at what levels will the well pump start and stop? How will the underground storage be filled?

Collins Heights Industrial Park Subdivision February 15, 1979 Page two

- 4. Engineering specifications should include the following:
  - a. Specifications for pipe fitting
  - b. Bearing area of thrust blocking
  - c. Degree of compaction of backfill in terms of percent density as specified in ASTM D698
- 5. The new storage tank must have a drain pipe. The drain line termination must meet the same criteria as the overflow pipe.
- 6. A shutoff valve is needed on the 4" line from well #1 to the new tank to permit isolation of the tank for repairs.
- 7. Tank foundation specifications called for an oiled fine sand layer instead of concrete slab as shown in the plans. Please clarify.
- 8. All water storage coatings used should meet AWWA D-101 standards and must be EPA, FDA or NSF approved for use with portable water. Does the thermally curved epoxy used meet this criteria?

maile to S.3/1/19

/ <u>X</u> /	New		Perm	it No. <u>79-20</u>		
//	Renewal					
//	Modified					
	This	INTERSTATE (Name	of Facili	ty)	·	
		Western Interstance (Last) c/o Scott Engine 704 Douglas High	eering Com	(First)	(Mid	dle)
			(Stree	et or P.O. Box)		
		Gillette	c	ampbell	Wyoming	82716
		(City)	. (	County)	(\$=	tate)
		tall, or modify a _ in <u>Sections 24</u>				
-		Campbell				
Wyom	ing. This per	rmit shall be effec	tive for a	period of one (1	L)	years
from	the date of	issuance of this pe	rmit not t	co exceed five (5)	) years.	
HTUA	ORIZED BY:  Orized BY:  Administration Water Qualis	Oco strator ty Division	<u>7</u> Wy	Sober 6, Direction of En	Sund tor vironmenta	<u>د</u> اl Quality
	March 5, 1979	Issuance				

<sup>&</sup>quot;The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or insures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or opertional requirements."

mi 5/1-19

/ <u>X</u> / New		Permit No. 79-2	21R
// Renewal		•	•
// Modified			
			•
ORR	SUBDIVISION WATER MAIN	INSTALLATION FOR FOU Facility)	R TAPS
· TL:	·	• ,	•
וחו	s permit hereby authori	zes the applicant:	
	Orr	Ron	**************************************
	· (Last)	(First)	(Middle)
	c/o Ralph Goodson P.O. Box 125		
	1.0. box 125	(Street or P.O. Box	<u> </u>
	Sundance	Crook	Wyoming 82729
	(City) —	(County)	(State)
facility located	in Section 6, T.51	N., R.62W. (Legal Description	)
in the County of	Crook		, in the State of
Wyoming. This pe	ermit shall be effective	e for a period of	two (2) years
·	issuance of this permi		(5)
			(5) years. PROFESSION E. S.
AUTHORIZED BY:		•	See No. 1
			285 ≥
108000	(Va. Oa)	Loberto	hendin FATE OF WYON THE
	istrator	-	irector:
, water qual	ity Vivision	wyoming bept. o	f Environmental Quality
May 11	., 1979		·
Date of	Issuance		

<sup>&</sup>quot;The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or insures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or opertional requirements."

### REVIEW OF PLANS AND SPECIFICATIONS

# WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT:

Orr Subdivision Water Main Installation, Crook County

Ralph Goodson

ARCHITECT OR ENGINEER:

Bearlodge Engineering

P.O. Box 125

Sundance, WY 82729

WATER QUALITY DIVISION REFERENCE NUMBER:

79-21

REVIEWING ENGINEER:

Dan H. Kim, Tom Mueller

DATE OF REVIEW:

February 8, 1979

ACTION:

Not Authorized for Construction

#### COMMENTS:

- A letter from the City of Sundance should be provided, stating that the City can provide adequate water supply to the subdivision.
- 2. Are the eight lots total development in the subdivision? Will there be additional development in the future?
- 3. What are the proposed minimum and maximum water pressure in the subdivision?
- 4. Dead ends should be minimized by <u>looping</u> of all mains whenever practical. Please discuss.
- 5. Is the water to be supplied to the subdivision disinfected at the source?
- 6. Installation specifications for fire hydrants, valves, thrust blocking, etc., should be provided. Typical detail drawings are also needed for water service line, hydrants, trench backfilling, thrust blocks, etc.
- 7. Backfilling specifications should include materials of bedding and backfilling, degree of compaction in terms of maximum density, tamping methods, etc.
- 8. The proper standards for gate valves are AWWA C500 and for fire hydrants C502.

cc: Fred Sielbach, Jr. 1780 Westland Road Cheyenne, WY 82001

Cheyenne, WY	82001			
	<u>PE.RMIT</u>	TO CONSTRUCT		
/ <u>x</u> / New		Permit No	79-22RRRRR	
// Renewal		* 		
$\frac{X}{X}$ Modified				
	<b></b>			
	Mountain View Estate (Name	of Facility)		
This	permit hereby auth		nt:	
	Henning,	Ernest		/
	(Last)	(First	)	(Middle)
	135 South Gree	ley H <b>i</b> ghway		
		(Street or P.O	. Box)	
	Cheyenne,	· Laramie,	W	Y 82001
	(City)	(County)	· · · · · · · · · · · · · · · · · · ·	(State)
to construct, inst	tall, or modify a $$	water distribution	and subsurfac	e disposal
facility located		14N, R66W		
raciffey rocated		(Legal Descrip	otion)	
		•	•	
in the County of _	Laramie		, in t	he State of
Wyoming. This per	rmit shall be effect	tive for a period o	of two (2)	
from the date of i	issuance of this per	rmit not to exceed	five (5) year	(0)
	DOFFSS(O		•	
AUTHORIZED BY:	PROFESSION		•	ROBA 285 NO. 400
			- 0	/ <del>*</del> /
10000	WILLIAM L. GARLAN P.E.#1479	Labera	E Sund	OF WY
Adminis			Director	

July 31, 1979 Date of Issuance

Water Quality Div

Wyoming Dept. of Environmental Quality

Book grant

<sup>&</sup>quot;The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or insures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or opertional requirements."

THE STATE OF WYOUNG



# Department of Environmental Quality

Water Quality Division

401 W 19TH STREET

EQUALITY STATE BANK BUILDING CHEYENNE, WYCMING 82002

1111, 1994F 307 777 7781

December 23, 1980

Ernest Henning 135 South Greeley Highway Cheyenne, WY 82001

Subject: Construction Permit #79-22RRRRR

Mountian View Estates Mobile Home Park

Dear Mr. Henning:

On July 31, 1979, construction permit number 79-22RRRRR was is and to you for the purpose of expanding the potable water supply and sewage disposal facility at the Mountain View Mobile Home Park. Your application for the permit indicated that the facility was to be located in Section 22, 714N, R66W and the permit was issued accordingly. We now have information that would indicate that this location information is incorrect. We have reason to believe that the facilities would actually be located in Section 15, 714N, 166W. If this is true, the permit is invalid.

On December 11, 1980, Tom Norman and I visited the above facility. At that time we did not observe any reason why the construction should not be permitted. Therefore, if you will complete the enclosed application form with the corrected information and return it to us, we will issue a modified permit for the project.

If you have any questions about this, feel free to contact us about them.

Very truly yours,
Thusdore D. Coffee)

Theodore D. Coyer, P.E. Environmental Engineer

TC/mlb Enclosure

cc: Tom Morman

1. 4. 13. M

#### REVIEW OF PLANS AND SPECIFICATIONS

PROJECT: Mobile Home Park, Tract I, Crestmoor Addition, Laramie Co.

ARCHITECT OR ENGINEER: CSSA, 1780 Westland Road, Cheyenne, WY 82001

WATER QUALITY DIVISION REFERENCE NUMBER: 79-22RR

REVIEWING ENGINEER: Robert H. Pinther, P.E., M.S.

DATE OF REVIEW: July 11, 1979

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

#### COMMENTS:

The items under comments #1 and #2 set forth below are numbered as they were on review #79-22R of April 20, 1979.

- 1. Proposed correction of "As Built" water system
  - B. (2) The steel reservoir, when completed, shall have a 20 mil coal-tax epoxy coating and cathodic-protection for a 20 year life.
- 2. Proposed construction water system
  - B. (1) Submit plans and specifications covering the proposed storage tank. The steel reservoir shall be protected against corrosion as set forth in B (2) above for the existing reservoir in addition to embedment in washed sand.
    - (2) (a) Specify a 5 feet minimum horizontal separation between water and sewer service risers.
      - (b) Change AWWA number in disinfection note on sheet 2 of the plans from CGO1 to C601.
      - (c) Substitute section "II Crossings" of the enclosed "Requirements for Minimum Horizontal and Vertical Separation Between Water and Sewer Mains" in place of paragraph 9 Water Line Crossings on page SS-6 of the specifications.

- (d) Reduce allowable leakage in water distribution to ½ by increasing the denominator of the formula in paragraph 9 of the Water Main Construction Specifications from 3700 to 7400. A copy of Table 7 from AWWA Standards C600-77 is enclosed for your convenience in determining allowable leakage using the revised formula.
- (e) Well No. 3 shall be located so that no present or future sewer lines on this or adjacent property will be located within 50 feet of the well.
- D. The total developed ground water source capacity shall equal or exceed the design maximum day demand and equal or exceed the design average day demand with the largest producing well out of service.
- E. Provide a water sampling tap for each well.
- 2a. Proposed construction additional comments
  - A. Provide chemical analysis of water from the new well or wells.
  - B. Provide a brochure or detail sketch of the "well cap/vent" for the new well(s).
  - C. Provide a pump control device which will shut off the booster pumps before vacuum conditions occur in the pump suction header.
- 3. Include the following in the septic tank drainfield design:
  - A. Septic Tank
    - (1) Both access manholes shall be at least 20 inches least dimension.
  - B. Drainfield
    - (1) The gravel shall be covered with untreated building paper or equivalent before backfilling.
    - (2) Gravel for the disposal field shall range in size from ½ inch to 2½ inches.
- 4. Provide the following in connection with the specifications:
  - A. A minimum cover over water main for freeze protection is required.
  - B. From Section 7 of Water Main Construction Specifications, the statement "Where water lines cross under or less specified in Section 9 of this sanitary sewer construction specifications" does not make sense.

TABLE 7
Allowable Leakage per 1000 ft of Pipeline\*—gph

Avg. Test	,	اد المراجعة المعرض الم						Nominal )	Pipe Dian	neter—in.						- · ·	
Pressure psi	2	3	4	6	8	10	12	14	16	18	20	24	30	36	42	48	54
450	0.32	0.48	0.64	0.95	1.27	1.59	1.91	2.23	2.55	2.87	3.18	-3.82	4.78	5.73	6.69	7.64	8.60
<del>4</del> 00	0.30	0.45	0.60	0.90	1.20	1.50	1.80	2.10	2.40	2.70	3.00	3.60	4.50	5.41	6.31	7.21	8.11
350	0.28	0.42	0.56	0.84	1.12	1.40	1.69	1.97	2.25	2.53	2.81	3.37	4.21	5.06	5.90	6.74	7.58
300	0.26	0.39	0.52	0.78	1.04	1.30	1.56	1.82	2.08	2.34	2.60	3.12	3.90	4.68	5.46	6.24	7.02
275	0.25	0.37	0.50	0.75	1.00	1.24	1.49	1.74	1.99	2.24	2.49	2.99	3.73	4.48	5.23	5.98	6.72
250	0.24	0.36	0.47	0.71	0.95	1.19	1.42	1.66	1.90	2.14	2.37	2.85	3.56	<u>4.2</u> 7	4.99	5.70	6.41
$\frac{230}{225}$	0.23	0.34	0.45	0.68	0.90	1.13	1.35	1.58	1.80	2.03	2.25	2.70	3.38	4.05	4.73	5.41	6.03
. 200	0.21	0.32	0.43	0.64	0.85	1.06	1.28	1.48	1.70	1.91	2.12	2.55	3.19	3.82	4.46	5.09	5.73
175	0.20	0.30	0.40	0.59	0.80	0.99	1.19	1.39	1.59	1.79	1.98	2.38	2.98	3.58	4.17	4.77	5.30
150 .	0.19	0.28	0.37	0.55	0.74	0.92	1.10	1.29	1.47	1.66	1.84	2.21	.2.76	3.31	.3.86	4.41	4.97
125	0.17	0.25	0.34	0.50	0.67	0.84	1.01	1.18	1.34	.1.51	1.68	2.01	2.52	3.02	3.53	4.03	4.53
100	0.15	0.23	0.30	0.45	0.60	0.75	0.90	1.05	1.20	1.35	1.50	1.80	2.25	2.70	3.15	3.60	4.05

<sup>\*</sup> For pipe with 18-ft nominal lengths. To obtain the recommended allowable leakage for pipe with 20-ft nominal lengths, multiply the leakage calculated from the table by 0.9. If the pipeline under test contains sections of various diameters, the allowable leakage will be the sum of the computed leakage for each size.



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#### REVIEW OF PLANS AND SPECIFICATIONS -

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
State Office Building
Cheyenne, Wyoming 82002

PROJECT: Mobile Home Park, Tract I, Crestmoor Addition, Laramie County, Wyoming

ARCHITECT OR ENGINEER: CSSA, 1780 Westland Road, Cheyenne, Wyoming 82001

WATER QUALITY DIVISION REFERENCE, NUMBER: 79-22R

REVIEWING ENGINEER: Robert H. Pinther, P.E., M.S.

DATE OF REVIEW: April 20, 1979

ACTION: Reviewed (1) "As Built" Plans

(2) Proposed construction plans - NOT AUTHORIZED FOR CONSTRUCTION pending receipt of plans in compliance with the comments listed below under "Proposed COMMENTS: Construction" and "General"

- "As Built" Water System
  - A. The booster pump and pressure tank capacities shall be increased as set forth below or an equivalent hydraulic design that is acceptable to this Division:
    - (1) Provide at least 2-60 g.p.m. or 3-30 g.p.m. booster pumps. Each pump shall be capable of delivering at the design rate when pumping against the maximum expected working pressure.
    - (2) Provide enough additional gross pressure tank capacity to supplement the existing 120 gallon tank and attain a total gross pressure tank volume of at least 10 times the capacity of the largest pump in g.p.m.
  - B. As agreed during a conference on April 19, 1979 with Mr. Sielback and Mr. Abplanalb of CSSA and the owner, Ernest S. Henning, the following additional corrective action shall be taken:
    - (1) A gravity drain line at least 2 inches in diameter which discharges to grade shall be provided to drain the water system pump pit.
    - (2) Such additional corrosion protection for the reservoir shall be provided as may be required by this Division following our review of the specifications covering the protection provided prior to the installation of this reservoir. A copy of these specifications will be submitted to this Division by the Engineer.
    - (3) The open end of the reservoir overflow pipe shall face downward.

Mobile Home Park, Tract I, Crestmoor Addition Ref. No.: 79-22R

Page two

(4) The reservoir manhole cover shall extend down around the raised frame at least 2 inches and shall be watertight as well as locked in place.

# 2. Proposed Construction - Water System

- A. Show sewer service connections for unit spaces 7, 8 and 9 and provide the required 50 feet separation (20 feet if the sewer lines are constructed of water main quality pipe and pressure tested in place to 50 psi without leakage) between the sewer and any well or reservoir.
- B. As per the aforementioned conference with the Engineers and the owner, the following revisions and/or additions shall be made to the plans or specifications:
  - (1) A detailed description of the proposed 8000 gallon reservoir, if different than existing reservoir, after revision to comply with the standards of this Division. If a metal tank is to be employed, embedment in washed sand as well as protective coating shall be provided to prevent corrosion.
  - (2) Revise plans to comply with comments No. 2, 4, 6, 11, 12, 13 and 15 of our plan review #79-22 of January 22, 1979.
- C. The water service line to each trailer shall be at least 3/4 inches in diameter.
- D. At least one additional well should be obtained as soon as possible for standby purposes.
- E. Provide a water sampling tap for each well.
- F. Obtain at least 2 bacteriological samples from the new areas of the water system which show the water to be safe prior to placing new facilities into use.

# 3. Proposed Construction - Sewer System

- A. Relocated and/or enlarged the drainfield located nearest to the wells and reservoirs to obtain:
  - (1) The required 100 foot separation from any well or reservoir.
  - (2) Adequate area to accommodate the proposed septic tank effluent loading.
- B. Specify that cast iron or schedule 40 PVC pipe shall extend at least 5 feet from the inlet and outlet of each septic tank.

Mobile Home Park, Tract I, Crestmoor Addition Ref. No.: 79-22R
Page three

# 4. General

- A. The plans shall bear the seal or signature of the designing engineer who is a registered engineer in the State of Wyoming.
- B. At least 2 copies of the final plans shall be submitted for review.

RIAP Corrected Copy

## REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
State Office Building
Cheyenne, Wyoming 82002

marlee) 3/22/29

PROJECT: Mobile Home Park, Tract I, Crestmoor Addition, Laramie County, WY

ARCHITECT OR ENGINEER: Jon Anderson, CSSA, 1780 Westland Road, Cheyenne, WY 82001

WATER QUALITY DIVISION REFERENCE NUMBER: 79-22

REVIEWING ENGINEER: Robert H. Pinther, P.E., M.S.; Jake Strohman, P.E.

DATE OF REVIEW: 1/29/79 -

ACTION: Reviewed (1) "AS BUILT" plans covering items which have been verbally identified by the Engineer as having been constructed after 4/1/78.

COMMENTS: (2) P

(2) Proposed Construction Plans - NOT AUTHORIZED FOR CONSTRUCTION

# 1. "AS BUILT" Water System

- 1. Is the plastic water pipe serving the reservoir and Well No. 3 of the non-toxic type bearing the NSF seal of approval of the National Sanitation Foundation?
- 2. Is the top of the existing reservoir located at least 2 feet above normal ground level?
- 3. Is the bottom of the existing reservoir located above the groundwater table?
- 4. Is the overflow from the existing reservoir properly screened (with 24 mesh non-corrodible installed within the pipe at a location least susceptible to damage) and does it open downward?
- 5. Is the access manhole of the existing reservoir provided with a frame extending 4" to 6" above the reservoir roof with the cover extending down around the frame at least 2 inches?
- 6. Does the existing 87 gallon pressure tank meet the ASME code requirements as well as those set forth in Section 2.8, Appendix A, Chapter III of the Wyoming Water Quality Rules & Regulations 1976?
- 7. What is the type, thickness & weight of the material used to construct the reservoir?

- 2). Proposed Construction Water System .
  - 1. Specify that all plastic pipe shall be of the non-toxic type bearing the NSF seal of approval of the National Sanitation Foundation.
  - 2. Show the highest seasonal groundwater level in the drainfield area.
  - 3. Revise the plans as necessary to provide a separation of at least 50 feet between either well or reservoir and any source of contamination such as sewer lines, septic tanks and manholes with the exception that sewer lines constructed of water main quality pipe and pressure tested in place to 50 psi without leakage may be located at distances greater than 20 feet and less than 50 feet.
  - 4. Provide a minimum separation of 100 feet between either well or reservoir and any drainfield.
  - 5. Submit detailed plans and specifications covering the access manhole, overflow, elevation with respect to ground level, material's of construction, re-inforcing, water tight construction, wall and roof thickness, etc., of the proposed 8,000 gallon ground level storage tank.
  - 6. The dead ends on the distribution system shall each have a blowoff or flushing hydrant for flushing purposes.
  - 7. Provide a second distribution system pump which has a capacity of at least 15 (15 + 15 = 30 gpm total) gallons per minute at the expected total operating discharge head, i.e. adequate to supply a maximum hourly flow of twice the average daily (16 hrs/day) flow.
  - 8. To avoid the hazard of flooding as well as the hazard of shallow suction lines & their location too close to sewer lines and drainfields, the new pump shall be located directly over one of the ground level reservoirs with an insulated pumphouse or a submersible with a below grade discharge unit provided to prevent freezing.
  - 9. At such time as major changes are made in the system the existing distribution system pump should be located above grade as described in comment #8 above.
  - 10. Submit a sketch of a typical water service riser with control works, method of preventing freezing, concrete collar, etc.
  - 11. Provide 5 feet minimum separation between water and sewer service risers.
  - 12. Provide for disinfection of the new storage reservoir and piping prior to going into service in accordance with the procedure as set forth in the current addition of AWWA Standards C601 and D102.

Review of Reference No. 79-22 Page 3

- 13. Provide a minimum vertical separation of 18 inches between water and sewer lines at crossings. The sewer lines shall be below the water lines.
- 14. Specify that all electrical work and components shall be in compliance with latest edition of the National Electrical Code.
- 15. All water lines shall be pressure tested prior to burial at a minimum of  $1\frac{1}{2}$  times the normal operating pressure.
- 16. Well No. 3 is located less than 50 feet from the property line along Glenco Drive. Any future sewer line in this right of way would be too close to this well.
- 3). Proposed Construction Sewer System
  - 1. Submit a detail of a typical sewer service riser with a non-breakable water tight plug. (See enclosed suggested design).
  - 2. Specify that the maximum infiltration or exfiltration shall be 200 gallons per inch of pipe diameter per mile per day.
  - 3. Specify that the maximum vertical deflection of any sewer pipe shall not exceed 5% of the internal pipe diameter.
  - 4. The plastic inlet and outlet pipes at the septic tanks shall be schedule 40.

THIS IS NOT A FINAL REVIEW Enclosure (1)

mailed 2/6/79

## REVIEW OF PLANS AND SPECIFICATIONS

# WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: Mobile Home Park, Tract I, Crestmook Addition, Lakamie County, WY

ARCHITECT OR ENGINEER: Jon Anderson, CSSA, 1780 Westland Road, Cheyenne, WY 82001

WATER QUALITY DIVISION REFERENCE NUMBER: 79-22

REVIEWING ENGINEER: Robert H. Pinther, P.E., M.S.; Jake Strohman, P.E.

DATE OF REVIEW: 1/29/79 -

ACTION: Reviewed (1) AS BUILT plans covering items which have been verbally identified by the Engineer as having been constructed after

COMMENTS: (2) Proposed Construction Plans

- 1. "AS BUILT" Water System
  - 1. Is the plastic water pipe serving the reservoir and Well No. 3 of the non-toxic type bearing the NSF seal of approval of the National Sanitation Foundation?
  - 2. Is the top of the existing reservoir located at least 2 feet above normal ground level?
  - 3. Is the bottom of the existing reservoir located above the groundwater table?
  - 4. Is the overflow from the existing reservoir properly screened (with 24 mesh non-corrodible installed within the pipe at a location least susceptible to damage) and does it open downward?
  - 5. Is the access manhole of the existing reservoir provided with a frame extending 4" to 6" above the reservoir roof with the cover extending down around the frame at least 2 inches?
  - 6. Does the existing 87 gallon pressure tank meet the ASME code requirements as well as those set forth in Section 2.8, Appendix A, Chapter III of the Wyoming Water Quality Rules & Regulations 1976?
  - 7. What is the type, thickness & weight of the material used to construct the reservoir?

- 2). Proposed Construction Water System
  - 1. Specify that all plastic pipe shall be of the non-toxic type bearing the NSF seal of approval of the National Sanitation Foundation.
  - 2. Show the highest seasonal groundwater level in the drainfield area.
  - 3. Revise the plans as necessary to provide a separation of at least 50 feet between either well or reservoir and any source of contamination such as sewer lines, septic tanks and manholes with the exception that sewer lines constructed of water main quality pipe and pressure tested in place to 50 psi without leakage may be located at distances greater than 20 feet and less than 50 feet.
  - 4. Provide a minimum separation of 100 feet between either well or reservoir and any drainfield.
  - 5. Submit detailed plans and specifications covering the access manhole, overflow, elevation with respect to ground level, material's of construction, re-inforcing, water tight construction, wall and roof thickness, etc., of the proposed 8,000 gallon ground level storage tank.
  - 6. The dead ends on the distribution system shall each have a blowoff or flushing hydrant for flushing purposes.
  - 7. Provide a second distribution system pump which has a capacity of at least 15 (15 + 15 = 30 gpm total) gallons per minute at the expected total operating discharge head, i.e. adequate to supply a maximum hourly flow of twice the average daily (16 hrs/day) flow.
  - 8. To avoid the hazard of flooding as well as the hazard of shallow suction lines & their location too close to sewer lines and drainfields, the new pump shall be located directly over one of the ground level reservoirs with an insulated pumphouse or a submersible with a below grade discharge unit provided to prevent freezing.
  - 9. At such time as major changes are made in the system the existing distribution system pump should be located above grade as described in comment #8 above.
  - Submit a sketch of a typical water service riser with control works, method of preventing freezing, concrete collar, etc.
- 11. Provide 5 feet minimum separation between water and sewer service risers.
- 12. Provide for disinfection of the new storage reservoir and piping prior to going into service in accordance with the procedure as set forth in the current addition of AWWA Standards C601 and D102.

Review of Reference No. 79-22 Page 3

- 13. Provide a minimum vertical separation of 18 inches between water and sewer lines at crossings. The sewer lines shall be below the water lines.
- 14. Specify that all electrical work and components shall be in compliance with latest edition of the National Electrical Code.
- 15. All water lines shall be pressure tested prior to burial at a minimum of  $1\frac{1}{2}$  times the normal operating pressure.
- 16. Well No. 3 is located less than 50 feet from the property line along Glenco Drive. Any future sewer line in this right of way would be too close to this well.
- 3). Proposed Construction Sewer System
  - Submit a detail of a typical sewer service riser with a non-breakable water tight plug. (See enclosed suggested design).
  - 2. Specify that the maximum infiltration or exfiltration shall be 200 gallons per inch of pipe diameter per mile per day.
  - 3. Specify that the maximum vertical deflection of any sewer pipe shall not exceed 5% of the internal pipe diameter.
  - 4. The plastic inlet and outlet pipes at the septic tanks shall be schedule 40.

Enclosure (1)

17-10-17

//	New				Pei	mit No	79 <b>–</b> 23R			<u>.</u>
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			Attention	ı: Mike M	cDill			·		
			Sunburst (Last	Water and	Sewer I	istrict (Fir	st)		(Middle)	
	-		P.O. Box	159	٠					•
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<sup>&</sup>quot;The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or insures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or opertional requirements."

News "

# REVIEW OF PLANS AND SPECIFICATIONS

# WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION 30 East Grinnell Sheridan, Wyoming 82801

PROJECT:

Sunburst Water and Sewer District - New Well Connection

ARCHITECT OR ENGINEER:

Attention: Mr. Charles S. Hruby, Jr.

Hoskins-Western-Sonderegger, Inc.

P.O. Box 2020

Gillette, WY 82716

WATER QUALITY DIVISION REFERENCE NUMBER:

79-23 Ref. 76-369RRRR

REVIEWING ENGINEER:

Dan H. Kim

DATE OF REVIEW:

January 23, 1979

ACTION:

Not Authorized for Construction

#### COMMENTS:

1. Please submit complete details of the new well (i.e., depth, casing, grouting, capping, design yield, chemical analysis, disinfection procedures, pump details, well log, pitless adaptor details, etc.).

Well construction shall be performed in accordance with Ten States Standards for Water Works, Section 3.2.

- \*Bacteriological and chamical analysis may be submitted upon completion of drilling.
- 2. Specifications of water main installation are needed.
- It is the Department's policy that all water supplies are required to have an ability for disinfection. Therefore, the proposed well needs a disinfection system. Please provide details.

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# PERMIT TO CONSTRUCT

/ <u>x</u> /	New				
//	Renewa]	r.	Permit No	79-24R	<del></del>
//	Modified				
			st Water Company		
		(Nam	e of Facility)		
•	ן	This permit hereby au	thorizes the applic	ant:	
		Vista West Water (Last)	r Company (First)	(Middle	.)
		Box 567	( ,	•	•
•			(Street or P.O.	Box)	
		Casper	Natrona	Wyoming 8260	
		(City)	(County)	(State)	
to c	onstruct, ins	tall, or modify a <u>Met</u>	ter House & Transmis	ssion Line	
		inSection 28	& 34, T34N, R80W		
	v		(Legal Description	nn)	
in t	he County of	Natrona		, in the State	of
Wyom	ning. This pe	rmit shall be effecti	ve for a period of	22	years
from	the date of	issuance of this perm	nit not to exceed fi	ve (5) years.	907E83/07
AUTH	ORIZED BY:		·		
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	Water Quali	ty Di <b>V</b> ision	wyoming Dept.	of Environmental	ANOTHER
	April 4,	1979			
		Issuance			

"The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or insures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or operational requirements."

This permit <u>does not</u> supercede the requirements for obtaining a Septic Tank Permit from Natrona County Health Department.

mailed 3/28/19

### REVIEW OF PLANS AND SPECIFICATIONS

# WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: Additional Water Supply (BPU Meter House & Transmission Main), Vista

West Water Company, Natrona County

ARCHITECT OR ENGINEER:

R. L. StreeterII, Sigma Engineering, P. O. Box 4060,

Casper, WY 82601

WATER QUALITY DIVISION REFERENCE NUMBER: 79-24

REVIEWING ENGINEER:

Robert H. Pinther, M.S., P.E., Jake Strohman, P.E.

DATE OF REVIEW:

2/16/79

ACTION:

NOT AUTHORIZED FOR CONSTRUCTION

#### COMMENTS:

- Submit a letter from the BPU indicating that an adequate supply of potable water is available at the metering point to satisfy the present and future requirements of the Vista West Water Company limited only by the capacity of the proposed transmission line.
- The maximum diameter of large stones and boulders in the pipe trench backfill material shall be 8 inches.
- Specify that the leakage shall not exceed 11.72 gallons per inch of pipe diameter per mile of length per 24 hours. (See Table 7 of AWWA Standard 0699-77).

19-25 Permit issued 8-101 MRR under y

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# PERMIT TO CONSTRUCT

/ <u>x</u> /	New			and the second s
//	Renewal		Permit No <del></del>	
//	Modified			
		A STATE OF THE PARTY OF THE PAR	Paradise Valley	
		(Name	e of Facility)	
	Т	his permit hereby aut	thorizes the applicant:	
		Casper Board of	Public Utilities	/v: 112 - \
		(Last)	(First)	(Middle)
		200 North David	/Start on D.O. Pov	
			(Street or P.O. Box)	
		Casper	Natrona (County)	Wyoming 82601 (State)
		(City)		-
to 🤅	onstruct, inst	all or modify a Wa	ter Distribution System	
faci	- lity located i	n City of Casper		
,			(Legal Description)	
in t	he County of _	Natrona	<u> </u>	in the State of
	•	•	ve for a period of	
from	n the date of i	issuance of this perm	it not to exceed five	(5) years.
AUTH	HORIZED BY:			
<u>u</u> '	Admini Water Quali	Strator ty Division	D	Jundin irector Environmental Quality
	January 29		•	
	Date of	issuance		

"The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or insures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or operational requirements."

This permit <u>does not</u> supercede the requirements for obtaining a Septic Tank Permit from Natrona County Health Department.

Mailed 5-4-79

# PERMIT TO CONSTRUCT

					**
/ <u>X</u> X/	New		Permit No	79-27	
/	Renewal				
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		(Name o	f Facility)		
	This	permit hereby autho	rizes the applica	nt:	
		Luhr Bros., Inc.			
•		(Last)	(First	)	(Middle)
		P.O. Box 69			
			(Street or P.O	. Box)	
		Columbia	•	Illinois	62236
		(City)	(County)	<del></del>	(State)
faci	lity located i	n Sec. 6, T25N	, R65W (Legal Descri	ntion)	
			, Legar Deserr	, , , , , , , , , , , , , , , , , , ,	
in t	he County of _	Platte		, in	the State of
Wyom	ing. This per	mit shall be effect	ive for a period	oftwo	years
from	the date of i	ssuance of this per	mit not to exceed	five (5) yea	rs.
	•				OT E.
AUTH	ORIZED BY:	•			NO. 285
u	Olan Co Adminis	Jala Q	Lover	La Sund Director	in SATE OF WI
	Water Qualit		Wyoming De		nmental Quali
	May 2,				

Date of Issuance

<sup>&</sup>quot;The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or insures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or opertional requirements."

/X_/ New		Permit No	79-28R
/ <u>_</u> / Renewal.			
/ <u>_</u> / Modified	1		
	,		-
	Plain Vi	ew Road of Facility)	·
		• .	
	This permit hereby auth	norizes the applicant:	
	The Bluffs Compa	nv	
	(Last)	(First)	(Middle)
	425 Cole Shoppin	g Center	
		(Street or P.O. Bo	x)
	Cheyenne	Laramie	Wyoming 82001
	(City)	(County)	(State)
facility loca	ted in <u>Seciton 21</u> ,	T14, R66 (Legal Description	1)
	r lawamia		
in the County	<del>-</del>		, in the State of
Wyoming. Thi	s permit shall be effec	tive for a period of	
from the date	of issuance of this pe	rmit not to exceed five	e (5) years.
AUTHORIZED BY	:		
		$\bigcirc$	
William	& Onlas	Hover 6	, Dunden
	ministrator uality Division		director of Environmental Qualit
Echni			
	ary 28, 1979 of Issuance		

<sup>&</sup>quot;The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or insures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or opertional requirements."

mailed 2/20/29

# REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
State Office Building
Cheyenne, Wyoming 82002

PROJECT: Section of Sewer Main in Plain View Road and Water Taps in the Bluffs, Buffalo Hills Addition, Laramie County

ARCHITECT OR ENGINEER: Frank M, Cole, P.E., 425 Cole Shopping Center. Cheyenne, WY

WATER QUALITY DIVISION REFERENCE NUMBER: 79-28

REVIEWING ENGINEER: Frank R. Harman, M.S., P.E., Jake Strohman, P.E.

DATE OF REVIEW: 2/15/79

ACTION: NOT AUTHORIZED FOR CONSTRUCTION PENDING RECEIPT OF UNDERMENTIONED INFORMATION

#### COMMENTS:

1) Water Taps. Where water taps cross sewer mains specify that the water tap in each instance will cross above the sewer main with a minimum vertical separation of 18 inches.

2) If the project is to be constructed to meet the City of Cheyenne's Water and Sewer Lines Specifications as approved by the Wyoming Department of Environmental Quality, a statement to that effect shall be furnished to this Division.

/	New	•		Permit No	79-29RR	
·/	Renewal		•			
/ <u>X</u> _/	Modified			•		
		Modicina Pay	, Wator	Distribution Sy	vstem	
	<u></u>			Facility)	, 300	<del></del>
	This	permit hereby	authori	zes the applica	ant:	
		Town of Medi	icine Br	nW .		
	•	(Last)	- TOTAL BO	(First	t)	(Middle)
	•	D.O. Doy 156	=			•
		P.O. Box 156		(Street or P.0	O. Box)	
		Medicine Boy	AJ .	Carbon,		WY 82329
	,	(City)	· · · · · · · · · · · · · · · · · · ·	(County)		(State)
faci	lity located	in Sec. 5 &	8, 1221	(Legal Descr	iption)	1
faci	lity located	in Sec. 5 &	8, T22	N, R78W	intion)	
						•
	he County of	Carbon			<del></del>	the State of
Wyon	ning. This pe	ermit shall be e	ffectiv	ve for a period	oftwo (	2) years
from	the date of	issuance of thi	s permi	t not to exceed	d five (5) ye	7/ C U
		_				SE SE SE
AUTH	ORIZED BY:					NO. 285
		· .			71	
10	900.	(0,0,0)		Tobe	No Sur	du BIE OF WYÜN
<u>V</u>		strator		Winning D	Director	
	Water Quali	ty Di <b>v</b> ision	•	wyoming D	epi, or Envir	onmental Quality
	May 23,	, 1979				
	Date of	Issuance .	<del></del> .			

<sup>&</sup>quot;The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or insures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or opertional requirements."

#### REVIEW OF PLANS AND SPECIFICATIONS

# WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: Town of Medicine Bow, (Water) Distribution System Improvements,

Medicine Bow, WY - Carbon County

ARCHITECT OR ENGINEER: Banner Associates, Inc., 309 So. 4th Street, Laramie, WY

WATER QUALITY DIVISION REFERENCE NUMBER: 79-29R

REVIEWING ENGINEER: Robert H. Pinther, M.S., P.E., Jake Strohman, P.E.

DATE OF REVIEW: 3/28/79

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

#### COMMENTS:

1. Revise the note by asterisk in "Parallel Line Detail" on sheet 2 of 2 of the plans to read:

In cases where it is not practical to maintain a ten foot separation between existing sewer and new water lines the following construction may be used when approved by the designing engineer:

The horizontal separation between the water and sewer main shall be as great as is practical and the water main shall be laid in a separate trench or on an undistrubed earth shelf located on one side of the sewer at such an elevation that the bottom of the water main is at least 18 inches above the top of the sewer.

2. Specify that the PVC 6" and 8" water mains shall be tested for hydrostatic pressure and leakage in accordance with AWWA Standard C600-77, Section 4-Hydrostatic Testing. The maximum allowable leakage shall be 0.55 gallons per hour per 1000 feet of 6 inch pipeline and 0.74 gallons per hour per 1000 feet of 8 inche pipeline.

mailed 3/14/19

#### REVIEW OF PLANS AND SPECIFICATIONS

# WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: Town of Medicine Bow (Water) Distribution System Improvements,

Medicine Bow, WY, Carbon County

ARCHITECT OR ENGINEER: Banner Associates, Inc., 309 So. 4th Street, Laramie, WY

WATER QUALITY DIVISION REFERENCE NUMBER: 79-29

REVIEWING ENGINEER: Robert H. Pinther, M.S., P.E., Jake Strohman, P.E.

DATE OF REVIEW: 3/5/79

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

#### COMMENTS:

- 1. The plans shall bear the seal or signature of the designing engineer who is registered in the State of Wyoming.
- 2. Submit specification covering the construction of the 6" and 8" PVC water main. This should include, but not necessarily be limited to, the following:

a. Care in laying

- b. Removal of stones for a depth of at least 6" below the bottom of the pipe.
- c. Pressure and leakage testing
- d. Disinfection
- e. Jointing
- f. Provision of adequately sized thrust blocks, tie rods or joints designed to prevent movement at all ties, bends and plugs.

FH maded 3/14/27

$\sqrt{x}$ New		. Permit No. <u>79-30</u>	1
// Renev	val		
/ <u>_</u> / Modif	fied .	•	
	Dolling S	ubdivision	
		of Facility)	
	This permit hereby aut	horizes the applicant:	•
	Walters	Roy	0.
	(Last)	(First)	(Middle)
	P. O. Box 219		
va v		(Street or P.O. Box)	
	Rawlins	Carbon	Wyoming 82301
	(City)	(County)	(State)
	ocated in Section 8,		
in the Cou	nty ofCarbon		. in the State of
	This permit shall be effect		
	late of issuance of this pe		····
AUTHORIZED	BY:		
			$\sim$ $/$
( L) Qlia	L Jala D	Dobert 6	Sundin
Wate	Administrator r Quality Division	Di Wyoming Dept. of	rector Environmental Quality
		- ·	
	nuary 30, 1979 Tate of Issuance		

<sup>&</sup>quot;The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or insures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or opertional requirements."

mailed 3/1/19

# PERMIT TO CONSTRUCT

/ <u>X</u> /	New		Permit No. 79-31	
//	Renewa1			
//	Modified	·		
		Plaza Del Ra	nge	-
•	<del></del>	(Name of	Facility)	
	This	permit hereby author	izes the applicant:	
		Del Range III	species and the state of	-
,		(Last)	(First)	(Middle)
		3306 Meyer Ct., S	uite 105	
			(Street or P.O. Box)	
		Cheyenne	Laramie	Wyoming 82001
	·	(City)	(County)	(State)
faci	lity located	in Section 22, T14,  Laramie	er Distribution & Sewag  R66  (Legal Description)	, in the State of
		•	- - -	
			re for a period of	·
from	the date of	issuance of this permi	t not to exceed five (	5) years.
AUTH	ORIZED BY:	·		
<u>u</u>	Admini Water Quali	strator ty Division	Dobert 6  Dire  Wyoming Dept. of I	S. Sundin ector Environmental Qualit
	February	20, 1979		

"The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or insures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or opertional requirements."

Date of Issuance

mailed 3/20/19

/ <u>x</u> /	New			Permit No	79~32R
//	Renewal				
//	Modifie	d			
			Atlantic Pi	m Reservoir	
				Facility)	
		This p	permit hereby author	izes the applicant:	:
			City of Rawlins		·
			(Last)	(First)	(Middle)
			D 0 Poy 052	•	
			P. 0, Box 953	(Street or P.O. I	Box)
			Rawlins	Carbon	Wyoming 82301
		_	(City)	(County)	(State)
to c	construct	, insta	all, or modify a	Raw Water Reserve	oir
			Section 14,	T20N, R88W	
	•		<del></del>	(Legal Descripti	ion)
in t	the Count	y of	Carbon		, in the State of
			nit shall be effecti		-
			ssuance of this perm		
			· · · ·		
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المكل		dminist			Director
	Water	Quality	y <b>V</b> ivision	Wyoming Dept.	. of Environmental Quali
	March	16, 19	979		
-			ssuance		

<sup>&</sup>quot;The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or insures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or opertional requirements."

mailed 3/hg

# REVIEW OF PLANS AND SPECIFICATIONS

# WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: City of Rawlins, Atlantic Rim Reservoir, Rawlins, WY, Carbon County

ARCHITECT OR ENGINEER: Larry Lockey, Meurer, Serafini & Meurer, Inc., Denver, CO

WATER QUALITY DIVISION-REFERENCE MUMBER: 79-32

REVIEWING ENGINEER: Robert H. Pinther, M.S., P.E., Jake Strohman, P.E.

DATE OF REVIEW: 2/26/79

ACTION: NOT AUTHORIZED FOR CONSTRUCTION CONTINGENT UPON ISSUANCE & SUBMITTAL TO THIS DIVISION PRIOR TO START OF CONSTRUCTION A CHANGE ORDER OR ADDENDUM COVERING COMPLIANCE WITH THE COMMENTS SET FORTH BELOW AS PER OUR PHONE CONVERSATION 2/28/79 WITH COMMENTS: RICK GONCALVES OF MSM.

- 1. Is the Koppers metal paint specified on plan sheet 2 of 8 Glamorglaze 1200 of Glamorglaze 200?
- 2. Revise the last 2 sentences of Section 01011-17 <u>Disinfection of Water Mains</u> of the specifications to read: A water main leakage test shall be specified and the test shall be conducted in accordance with Section 4.2 Leakage Test of AWWA Standard C-600-77. The allowable leakage shall be in accordance with Table 7 of this Standard.
- 3. AWWA Standard C600-68 <u>Disinfection of Water Mains</u> shall take precedent over the sterilization procedure in Section 02555-3.8 <u>Sterilization</u> of the specifications.
- 4. The AWWA Standard C-600 for leakage testing referred to in Comment 2 above shall take precedent over the leakage test proceedure in Section 02555-3.7.5 Leakage Test of the specifications.
- 5. Submit one more copy of Sheet 5 of 8 showing % inch screen on outlet and ½ inch screen on reservoir overflow.
- 6. As per a letter of 2/26/79 to this Division from Kim Keaton, Rawlins Assistant City Engineer, a chlorination facility will not be provided at the Atlantic Rim Reservoir under this contract. The water will continue to be chlorinated at the existing facility at Peaking I Reservoir.
- 7. The City of Rawlins shall submit complete plans and specifications to this Division and obtain a permit to construct prior to starting work on any future chlorination facility.



# Department of Environmental Quality Water Quality Division

**933 MAIN** 

LANDER, WYOMING 82520

TELEPHONE 307-332-3144

March 18, 1980

Mr. James C. Gores 625 E. Madison, Suite 5 Riverton, WY 82501

RE: Canyon Campground Recreational Vehicle Park, Hot Springs County, #79-33RR

Dear Mr. Gores:

Thank you for your reply to our letter of January 29, 1980. As a result of your answer, we are sending your plans back to you until you submit again next year.

If you have any questions, please do not hesitate to contact this office.

Sincerely,

M. Robin Collins, P.E.

Northwest District Engineer

With Manson 80 Plans 18-80 Plans 18-80



# Department of Environmental Quality Water Quality Division

**933 MAIN** 

LANDER, WYOMING 82520

TELEPHONE 307-332-3144

January 29, 1980

Mr. James C. Gores 625 E. Madison, Suite 5 Riverton, WY 82501

> RE: Canyon Campground Recreational Vehicle Park, Hot Springs County, #79-33

Dear Mr. Gores:

Our records indicate your application for a permit to construct for the above referenced facility has not been resubmitted to this office. Please indicate below the status of your application.

<del></del>	The application will not be resubmitted. The application is to be removed from DEQ files.
	The application will be resubmitted within 30 days.
	The facility has been constructed or is under construction.
χ_	Other remarks on hold 141- Enan. Code

If this letter is not returned within 30 days, your application will be removed from our files.

Sincerely,

Rick Engelmant

District Engineer

RE/ms

### REVIEW OF PLANS AND SPECIFICATIONS

#### WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER QUALITY DIVISION 933 MAIN STREET. LANDER, WYOMING 82520

CANYON CAMPGROUND - RV PARK PROJECT:

OWNER: MR. & MRS. LARRY TALOVICH - 620 MAIDEN, THERMOPOLIS, WYO. 82443

ARCHITECT OR ENGINEER:

J.H. HIBSMAN, P.E.

ARIX, 625 E. MADISON, SUITE 5

WATER QUALITY DIVISION REFERENCE NUMBER:

REVIEWING ENGINEER:

RICK ENGELMANN Rick Engel

DATE OF REVIEW:

MAY 9, 1979

ACTION:

NOT AUTHORIZED.

COMMENTS:

### **GENERAL:**

- 1. There seems to be some confusion about the well permit: You are no doubt dealing with the State Engineers Office in Cheyenne. We, in addition, have regulations applying to wells used for public water supplies. See Sec. 3.2 of the '68 Ten State Standards, or Sec. 3.2 of the '76 Ten State Standards.
- 2. We still need a full reply to comment 3.b. of the 19 February review.

### WATER DISTRIBUTION SYSTEM:

- 1. The proposed blowoff assembly is unacceptable. The blowoff line must extend above grade and discharge through a downward turned, screened elbow that is a minimum of one foot above grade. The hole in the elbow is also not permissible.
- 2. We still need material and installation spec.s on the service connections. This would include spec.s for the corporation stop, shutoff valve, and curb stop.

#### Disposal System:

The "Wyoming Minimum Standards for Private Sewage Disposal Systems" were never more than Wyoming Public Health Department suggested standards. The Wyoming Public Health Department authority over wastewater systems was ended with the creation of D.E.Q., and we do not use these standards. Furthermore, until the Hot Springs County subdivision ordinances actually go into effect, we will have no assurance that the park will be used by RV's only.

On the basis of the above we are sticking to the 350 gpd per lot figure. With 36 lots you will need about 9000 gallons of septic tank capacity and 11000 CANYON CAMPGROUND - RV PARK

REF: 79-33R RICK ENGELMANN MAY 9, 1979 NOT AUTHORIZED

- 2 -

square feet of leach bed. There is one optimistic factor in all of this: If the County ordinances do go into effect, then the Talovich's may be able (with our approval) to serve additional lots with the 9000 gallon septic/11000 square foot leach bed system.

RHE:rhe

NO.

REVIEW OF PLANS AND SPECIFICATIONS

### WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER QUALITY DIVISION 933 MAIN STREET, LANDER, WYOMING, 82520.

(307) 332-3144

PROJECT:

CANYON CAMPGROUND - RECREATION VEHICLE PARK

ENGINEER:

J.H. HIBSMAN, P.E.

C.E. MAGUIRE, INC.

625 E. MADISON, SUITE 5 RIVERTON, WYO. 82501.

OWNER:

MR. & MRS. LARRY TALOVICH

620 MAIDEN

THERMOPOLIS, WYO. 82443

WATER QUALITY DIVISION REFERENCE NUMBER:

REVIEWING ENGINEER: RICK ENGELMANN

DATE OF REVIEW: FEBRUARY 19, 1979

NOT AUTHORIZED.

COMMENTS:

ACTION:

#### GENERAL

- 1. It is our understanding that this application covers the entire water distribution system for the park, sewer sections from m.h. 1 to m.h.2, m.h.2 to m.h.3, and m.h.3 to m.h. 7, and the sewage disposal system. It is not intended to apply the balance of the sewage collection system and the well supply. Is this correct?
- 2. It should be understood that before the well supply is constructed, engineered plans and spec.s for it must be approved by the department.
- 3. We need the following:
  - a. The spec.s should be more specific about fill lifts, type of compaction appropriate for the various pipe zones, and protection of pipe from mechanical compactors. (p. D1, B24).
  - b. If jetting is to be a compaction option, the jetting procedure must be specified and the criteria the engineer would use in judging the suitability of the method (types of native, bedding and backfill material appropriate for jetting, etc.) must be spelled out. (p. Dl, B24).
  - c. Specification of the number of density tests per 1000 lineal feet. (p. Dl, B25).

REVIEW:

CANYON CAMPGROUND - RECREATION VEHICLE PARK ENGINEER: J.H. HIBMAN, P.E. - C.E. MAGUIRE, INC.

79-33R

BY: RICK ENGELMANN FEBRUARY 19, 1979 NOT AUTHORIZED.

- 2 -

- d. All drawings signed by the design P.E.
- e. Some clarification of the approved water and sewer pipes for the project there are many types and classes of pipe listed in the spec.s with blanks that have not been filled in. What minimum classes are acceptable?

### WATER DISTRIBUTION SYSTEM .

We need the following:

- The working pressure at the lowest point of the water line.
   (p. D2, B26)
- b. Specifications for valves.
- c. There must be flushing hydrants or blowoff assemblies at all dead-ends.
- d. Specifications on water service connections. Note that the riser must extend at least 4" above grade. See enclosed Chapter III reg.s, Appendix A.

### SEWERAGE

1. Department standard for infiltration/exfiltration is a maximum of 200 gallons per inch  $\emptyset$  per mile of pipe.

The following are needed:

- a. Manholes at end of each sewerline.
- b. Sewer service connections to main line must use single piece wye branches only. The riser pipe must extend at least 4" above grade and be protected by a concrete collar. See Chapter III reg.s, Appendix A.

#### DISPOSAL SYSTEM

- 1. According to Department policy, the disposal system must be designed to handle the volume of wastes generated by a residential trailer park (see my letter of 1/26/79). Contrary to what Note 2 of Sheet 1 states, the disposal system is not adequate for the whole park. Assuming 30,000 + gpd (based on 87 lots, 3.5 people per lot, 100 gpcd), there must be a minimum of 24,000 gallons of septic tank capacity, based on the U.S. Public Health Service Manual of Septic Tank Practice (PHS Pub. 526) criteria.
- 2. The following are needed:

REVIEW
CANYON CAMPGROUND - RECREATION VEHICLE PARK
ENGINEER: J.H. HIBMAN, P.E. - C.E. MAGUIRE, INC.
79-33R
BY: RICK ENGELMANN
FEBRUARY 19, 1979
NOT AUTHORIZED. - 3 -

- a. The data from the percolation tests run for the seepage bed.
- b. Specifications for the septic tank and dosing siphon.
- 3. Please note: The Publ. Health Service criteria for a disposal field sewage application rate (5 where t equals the percolation rate (min./inch)) assumes a standard disposal field is being used, i.e. pipes in individual trenches. For seepage beds, the department divides the above rate by 1.5 as a safety factor.

•

### Sol

### REVIEW OF PLANS AND SPECIFICATIONS

### WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER QUALITY DIVISION 933 MAIN STREET, LANDER, WYOMING 82520

PROJECT: CANYON CAMP GROUND - RECREATION VEHICLE PARK

OWNER: MR. & MRS. LARRY TALOVICH, 620 MAIDEN, THERMOPOLIS, WYO. 82443.

ARCHITECT OR ENGINEER: JAMES C, GORES

C.E. MAGUIRE, INC.

625 E. MADISON, SUITE 5, RIVERTON, WYO. 82501.

WATER QUALITY DIVISION REFERENCE NUMBER:

79-33

REVIEWING ENGINEER:

RICK ENGELMANN

RE

DATE OF REVIEW:

JANUARY 26, 1979

ACTION:

NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

Dear Jim:

Due to the fact that Wyoming has no control over non-discharging facilities once they are built, we have had trouble with RV parks being used for permanent trailer homes. There have been cases of severely overloaded RV park septic systems caused by permanent trailer housing. For a facility such as the proposed park, where there are individual sewer and water hook-ups for each space, we insist on sewerage and sewage treatment facilities to be sized for 350 gpd per lot. For the proposed camp this will mean design flow of 30,000 gpd plus the flow from the tent area and dump station.

Because the above may cause a major change in the proposal, I have done only a rough review of the project. Some of the problems noted were:

- 1. There were no written specifications for materials and construction.
- 2. Since it appears that a well is part of this project, we need plans and spec.s on well construction, development, etc. See the '68 Ten State Standards, parts 3 and 6.2.
- 3. The blow-off assemblies are not acceptable. See '68 Ten State Standards, Sect. 8.5.3. The outlet must extend above ground with a downward screened elbow (or capped), or it could be a hydrant.
- 4. We need three copies of all submittals. One copy will go back to the engineer on approval, one is for DEQ Cheyenne, one is for DEQ, Lander.

Respectfully,

Rick Engelmann,

ENVIRONMENTAL ENGINEER II

mailed to S. 3/23/2

### PERMIT TO CONSTRUCT

/ <u>X</u> /	New	·	Permit No	34R /
//	Renewal			
//	Modified			,
	É	ERITAGE HOMES FOUR PLE	X (Lots 1 & 2, Block	<u> </u>
	and the second	(Name of	Facility)	
	This	permit hereby author	izes the applicant:	
		HERITAGE HOMES		
		(Last)	(First)	(Middle)
	-	P.O. Box 1504	*	
	·		(Street or P.O. Bo	x)
		Gillette	Campbel1	Wyoming 82716
		(City)	(County)	(State)
V 2		inSection 24, T49N		n)
in t	the County of _	Campbell	· .	, in the State of
Wyon	ning. This per	rmit shall be effective	ve for a period of _	two (2) years
froπ	n the date of	issuance of this perm	it not to exceed five	e (5) years.
AUTH	ORIZED BY:			•
le	) <u>Quaum (</u> Adminis Water Quali	Vala D strator	Robert 1	E. Lundin Director of Environmental Quality
c: Ji 		son & Brimacombe	Ayoming bept. (	s. Environmental qualit

<sup>&</sup>quot;The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or insures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or opertional requirements."

### REVIEW OF PLANS AND SPECIFICATIONS

### WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT:

Heritage Homes, 4-Plex; Wastewater Treatment Facility

Chargina

James Taylor

ARCHITECT OR ENGINEER:

Larson & Brimacombe

1901 Energy Court, Suite 120

Gillette, WY 82716

WATER QUALITY DIVISION REFERENCE NUMBER:

79-34

REVIEWING ENGINEER:

Dan H. Kim, Tom Mueller

DATE OF REVIEW:

February 13, 1979

ACTION:

Not Authorized for Construction (see comments)

#### COMMENTS:

- 1. Depth to the highest known groundwater table or impervious layer at the proposed leach field should be identified.
- 2. Please indicate the distances from the sewage treatment facility to:
  - a. any water well
  - b. drinking water line
- 3. Minimum distance between trenches must be six feet, not between pipes.
- 4. What is the maximum size of the graded gravel in the leach field?



ED HERSCHLER GOVERNOR

## Department of Environmental Quality Water Quality Division

1111 EAST LINCOLNWAY

CHEYENNE, WYOMING 82002

**TELEPHONE 307 777-7781** 

March 22, 1984

Mr. Charley Johnson 4414 East 10th Street Cheyenne, WY 82001

Dear Mr. Johnson:

On March 13, 1984, a status letter was sent to you concerning a permit to construct, reference number  $\sqrt{9-35R}$ , facility name Charley Johnson, MHP. The application is considered inactive and is being returned under the assumption that the applicant does not wish to proceed with the permit to construct process.

This project has <u>not</u> been permitted. Construction of this facility without a permit is a violation of the Environmental Quality Act and punishable with fines not to exceed \$10,000 per day of violation. If this project has already been constructed, it is your responsibility to immediately contact this office for further instruction. If you wish to reconsider construction of this facility, then application procedures pursuant to Chapter III, Water Quality Rules & Regulations, must be followed.

Sincerely,

LeKoy C. Feusner, P.E. Southeast District Supervisor

Water Quality Division

LCF/nc

cc: Jon Anderson
AVI Engineers
1700 Westland Road
Chevenne, WY 82001



### Department of Environmental Quality Water Quality Division

1111 EAST LINCOLNWAY

CHEYENNE, WYOMING 82002

TELEPHONE 307 777-7781



Mr. Charley Johnson 4414 E. 10th Street Cheyenne, WY 82001

Dear Mr. Johnson:

Our records indicate your application for a permit to construct has not been resubmitted to this office for review and authorization. The specific information for your proposed project are:

> Facility name: Charley Johnson, MHP, Septic Tank/Drainfield DEQ/WQD Reference Number: 79-35R Engineering Consultant: Jon Anderson, AVI Engineers

DEQ/WQD Reviewing Engineer:

Date of DEQ/WQD Review:

Robert Pinther April 20, 1979

	Plea	se indicate	below the	status of	your appl	ication an	d return	this form	to our
offi	ce:		•		٠.				
	<u>/</u>	The applica cancelled.	tion will	not be res	ubmitted	as the pro	posed pr	oject ha	s been
		The applica	tion will	be resubmi	tted with	in 30 days	•		
		The facility struction p	y has been lans and s	construct pecificati	ed, or is ons will	under con be submitt	struction ed within	. As bui 30 days.	lt con-
		Other remark	ks						

You are reminded that the construction, installation, or modification of any sewerage system, treatment works, disposal system, or other facility capable of causing or constributing to pollution, or public water supply system without a Permit to Construct is a violation of Wyoming State Statutes. Unless the Water Quality Division reviewing engineer receives this information within 15 days of the receipt of this letter, follow-up action will be taken.

Sincerely,

LeRoy C. Feusner, P.E.

Southeast District Supervisor

Water Quality Division

cc: Jon Anderson
AVI Engineers
1700 Westland Road

Cheyenne, WY 82001



### Department of Environmental Quality Water Quality Division

1111 EAST LINCOLNWAY

CHEYENNE, WYOMING 82002

TELEPHONE 307 777-7781

March 13, 1984

Mr. Charley Johnson 4414 E. 10th Street Cheyenne, WY 82.001

Dear Mr. Johnson:

Our records indicate your application for a permit to construct has not been resubmitted to this office for review and authorization. The specific information for your proposed project are:

Facility name:

Charley Johnson, MHP, Septic Tank/Drainfield

DEQ/WQD Reference Number: Engineering Consultant:

79-35R

Jon Anderson, AVI Engineers

DEQ/WQD Reviewing Engineer: Date of DEQ/WQD Review:

Robert Pinther April 20, 1979

Please indicate below the status of your application and return this form to our office:

/	The application will not be resubmitted as the proposed project has been cancelled.
	The application will be resubmitted within 30 days.
	The facility has been constructed, or is under construction. As built construction plans and specifications will be submitted within 30 days.
/	Other remarks

You are reminded that the construction, installation, or modification of any sewerage system, treatment works, disposal system, or other facility capable of causing or constributing to pollution, or public water supply system without a Permit to Construct is a violation of Wyoming State Statutes. Unless the Water Quality Division reviewing engineer receives this information within 15 days of the receipt of this letter, follow-up action will be taken.

Sincerely,

LeRoy C. Feusner, P.E.

Southeast District Supervisor

Water Quality Division

cc: Jon Anderson
AVI Engineers
1700 Westland Road
Cheyenne, WY 82001

### REVIEW OF PLANS AND SPECIFICATIONS

# WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: Charley Johnson Mobile Home Park, Laramie County

ARCHITECT OR ENGINEER: Jon L. Anderson, CSSA, Cheyenne, Wyoming

WATER QUALITY DIVISION REFERENCE NUMBER: 79-35R

REVIEWING ENGINEER: Robert H. Pinther, P.E., M.X.

DATE OF REVIEW: April 20, 1979

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

#### COMMENTS:

### As-Built Facilities - Water System

- 1. Are any of the water lines of the plastic type? If so, are they all of the non-toxic type for potable water bearing the seal of approval of the National Sanitation Foundation?
- 2. Is the well water supply in compliance with Section 2.8 <u>Pressure Tanks</u> and Section 2.9 <u>Well</u> of Chapter III, Wyoming Water Quality Rules and Regulations, 1976?

### Construction Plans - Sewer System

- 1. Cast iron or schedule 40 PVC pipe shall extend at least 5 feet from the septic tank inlet and outlet.
- 2. Both manhole covers for the septic tank shall be 20 inches least dimension.

### General

- 1. Submit in duplicate an application for a permit to construct the above named mobile home park. Forms are enclosed.
- 2. Submit two copies of sheet 2, revised, of the plans.

Enclosures: 2 permit applications

Mailed 2/28/19

### REVIEW OF PLANS AND SPECIFICATIONS

## WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: Charley Johnson Mobile Home Park, Laramie County, WY

ARCHITECT OR ENGINEER: John L. Anderson, CSSA, Cheyenne, WY 82001

WATER QUALITY DIVISION-REFERENCE NUMBER: 79-35

REVIEWING ENGINEER: Robert H. Pinther, M.S., P.E., Jake Strohman, P.E.

DATE OF REVIEW: 2/16/79

ACTION: Reviewed (1) "AS-BUILT" plans covering existing septic tank, drainfield and sewage collection system with hook-ups for 4 mobile homes.

(2) Plans for adding another septic tank & drainfield enlargement of a mobile home park. NOT AUTHORIZED FOR CONSTRUCTION

### "As-Built" Plans

- 1. Are the sewer mains at least 6 inches in diameter and are they sloped in compliance with the table under "1.3 Slope" in Appendix A, "Minimum Design Standards for Mobile Home Park Water & Sewage Facilities" in Chapter III of the Wyoming Water Ouality Rules & Regulations?
- 2. Does the rate of infiltration or exfiltration into or out from the sewer mains exceed the maximum allowable rate of 200 gallons per inch pipe diameter per mile per day?
- 3. Does the maximum vertical deflection of the sewer main exceed the maximum allowable deflection of 5% of the internal pipe diameter?
- 4. Is each sewer riser provided with a non-breakable water tight cap or plug?
- 5. Is the drainfield piping at least four feet above the seasonal high groundwater table?
- 6. Is there a separation of at least 5 feet between all water and sewer service risers?

#### Construction Plans

- 1. Cast iron or schedule 40 PVC pipe shall extend at least 5 feet from the septic tank inlet and outlet.
- 2. PVC pipe shall be sand bedded to a depth of four inches beneath the pipe and to a depth of six inches over pipe.

Review of Reference No. 79-35 Page 2

- 3. The following items shall be included in the septic tank design:
  - a. The inlet elevation shall be 3 inches above the outlet.
  - b. The access manhole covers shall be 20 inches least dimension.
- 4. The minimum distance between drainfield trenches shall be 6 feet.
- 5. The disposal field gravel shall be a minimum size of  $\frac{1}{2}$  inch and not greater than  $2\frac{1}{2}$  inches.
- 6. Cast iron or schedule 40 PVG pipe shall extend at least 5 feet from the septic tank inlet and outlet.

THIS IS NOT A FINAL REVIEW

cc: City-County Health Department, 315 W. 20th Street, Cheyenne, WY 82001

### WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION PERMIT TO CONSTRUCT

Mádel 2/20/29

$/\overline{\text{X}}$ New			
/_/ Renew	al	Permit No.	79–36R
<u>/</u> / Modif	ied		
	CELOTEX CORPORA	ATION SEWAGE DISPOSAL FA	CILITY
	(Na	ame of Facility)	•
	This permit here	eby authorizes the ap	oplicant:
	CELOTEX CORPORA	IION	
	(Last)	(First)	(Middle)
	P.O. BOX 590		
	<u> </u>	(Street or P.O.	Box)
	CODY,	WYOMING	82414
	(City)	(State)	(Zip Code)
to constr	ruct, install, or	r modify a SEPTIC TANK	- DRAINFIELD
facility	located in SEC.	29 T53N R101W	
		(regar ne	scription)
in the Co	ounty of PAR	K, in	the State of Wyoming.
This per	nit shall be effe	ective for a period (	of 2 years from
the date	of issuance of	this permit not to e	xceed five (5) years.
Authorize Administr Water Qua	un de Carlais	Director Department Quality	nt of Environmental
FEBRUARY			
Date of	Issuance		

GRAHAM, DIETZ & ASSOCIATES P.O. BOX 348 CODY, WYO. 82414

g&Q

### REVIEW OF PLANS AND SPECIFICATIONS

### WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER QUALITY DIVISION 933 MAIN STREET, LANDER, WYOMING 82520

PROJECT: CELOTEX CORP. SEWAG

CELOTEX CORP. SEWAGE DISPOSAL FACILITIES

OWNER: CELOTEX CORP., P.O. BOX 348, CODY, WYO. 82414

ARCHITECT OR ENGINEER: DARVIN DIETZ, P.E.

GRAHAM, DIETZ, AND ASSOC.

P.O. BOX 348

CODY, WYO. 82414

WATER QUALITY DIVISION REFERENCE NUMBER:

79 - 36

REVIEWING ENGINEER:

RICK ENGELMANN

- -

DATE OF REVIEW:

JANUARY 26, 1979

ACTION:

NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

We need the following:

a. A site plan showing building, system layout, distances to property lines, etc. (see sect. 3.1 in Appendix B of our Chapter III reg.s), and approx. ground slope.

b. Drainfield pipe trenches (not pipes) must be separated by a minimum of 6' of undisturbed earth.

Except for these items, everything looks quite adequate.

### WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION PERMIT TO CONSTRUCT

mailed to L. 2/6/29

/X/ New			
/// Rene	wal	Permit No	79-37 <sub>R</sub>
/_/ Modi	fied		
	•		
	STAUFFER CHEMICAL	L SEPTIC TANK - L	EACH FIELD
	(Name of Fa	acility)	
	This permit hereby author	orizes the appl	.icant:
	STAUFFER CHEMICA	L COMPANY	
	(Last) (F	irst)	(Middle)
	P.O. BOX 513		
	(St	reet or P.O. Bo	$(\mathbf{x})$
	GREEN RIVER,	WYO.	82935
	(City)	(State)	(Zip Code)
to const	ruct, install, or modify	a SEPTIC TANK-L	EACH FIELD
facility	located in SEC 15 T2	ON R109W (Legal Descr	ciption)
in the C	county of SWEETWATER	, in th	ne State of Wyoming.
This per	mit shall be effective for	or a period of_	2 years from
	e of issuance of this perm		
Authoriz  O O O O O O O O O O O O O O O O O O O	où l'Ola D	Director Department Quality	6, Sundin of Environmental
JANUARY 3	30, 1979 Issuance		

NELSON ENGINEERING

GREEN RIVER, WYO. 82935

P.O. BOX 365

# DEG

### REVIEW OF PLANS AND SPECIFICATIONS WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

٠.

WATER QUALITY DIVISION 933 MAIN STREET, LANDER, WYOMING, 82520. (307) 332-3144

PROJECT: STAUFFER CHEMICAL SEPTIC TANK - LEACH FIELD

ENGINEER: NELSON ENGINEERING

P.O. BOX 365

GREEN RIVER, WYO. 82935

OWNER:

WATER QUALITY DIVISION REFERENCE NUMBER: 79-37

REVIEWING ENGINEER: DOUG CRAIGATOR.

DATE OF REVIEW: JANUARY 23, 1979

ACTION: NOT AUTHORIZED.

COMMENTS:

- 1. Please fill out and submit an "Application for a Permit to Construct".
- 2. I strongly suggest that a cleanout be installed between the septic tank and the washroom. This would expedite maintenance and repairs should the line plug.
- c.c. M.S. Litus
   P.O. Box 513
   Green River, Wyo. 82935.

### WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION PERMIT TO CONSTRUCT

mailed 3/20/29

/ Nov		
/ New	T)	79-38
// Renewal	Permit No	Canal California (1)
// Modified		
LOT: 23. COMPANY S	estaurant 7	
(Name	of Facility)	
	•	
This permit hereby	authorizes the ap	pplicant:
LOT 23 COMPANY		
(Last)	(First)	(Middle)
(2225)		
P.O. BOX 2467	·	
	(Street or P.O.	Box)
JACKSON	WYOMING	83001
(City)	(State)	(Zip Code)
to construct, install, or m	odify a SEPTIC TAN	K-ELEVATED LEACH FIELD
facility located in SEC22	T41N R117W	
	(Legal De	scription)
in the County ofTETON	, in	the State of Wyoming.
This permit shall be effect	ive for a period	of 2 years from
the date of issuance of thi	is permit not to e	xceed five (5) years.
Authorized by		51
10000 of Va. Oa Q	Lober	16. Lundin
Administrator	Director	
Water Quality Division	Quality	nt of Environmental
FEBRUARY 7, 1979		
Date of Issuance		

PETER M. JORGENSEN P.O. BOX 1142 JACKSON, WYO. 83001

### PERMIT TO CONSTRUCT

/ <u>x</u> /	Hew	Permit No. 79-39RRR
/ _/	Renewal	
/ <u></u>	Modifie	្នា
		Septic_Tank - Mountain_View_Subdivision.#2(Name_Of_Facility)
		This permit hereby authorizes the applicant:
		Chopping, Porter  (Last) (First) (Middle)  Chopping Motor Lease, Inc.
		1625 N. Highway 26 (Street or P.O. Box)
	·	Riverton,Wyoming82501(State)
) to co	onstruct,	install, or modify a septic tank - leach field
facil	ity loca	ted in Sec. 30, T. 1 N., R. 4 E. (Legal Description)
in th	ne County	of, in the State of
Wyomi	ing. Thi	s permit shall be effective for a period of two years
from	the date	of issuance of this permit not to exceed five (5) years. PROFESSIONALE E. S. NO.
OHTUA	ORIZED BY	: PROFESSIONAL 285 3
ريار	Qua. Ad	ninistrator P.E. # 1479  P.E. # 1479  Director
	Water Q	Wyoming Dept. of Environmental Quality  5. 1980
	January 2	of Issuance

"The authority to construct granted by this permit does not mean or imply that the Myoming Department of Environmental Quality guarantees or insures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or opertional requirements."

### REVIEW OF PLANS AND SPECIFICATIONS

Openine

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER QUALITY DIVISION 933 MAIN STREET, LANDER, WYOMING, 82520.

(307) 332-3144

PROJECT: Mountainview Subdivision #2 Septic Tank - Drainfield

ENGINEER: Elmo G. Peterson, P. E.

Wind River Engineers

2333 Rose Lane

Riverton, WY 82501

OWNER:

Porter Chopping

Chopping Motor Lease, Inc.

1625 N. Highway 26 Riverton, WY 82501

WATER QUALITY DIVISION REFERENCE NUMBER: 79-39RR

REVIEWING ENGINEER: Rick Engelmann

DATE OF REVIEW:

December 19, 1979

ACTION: NOT AUTHORIZED.

TS: COM

> Some of the comments which follow could have shown up on the previous review. However, because of the very slow percolation rates, I thought the whole thing might have to be redesigned, so the comments were considered superfluous at the time.

- I am confused about the high percolation rate area. The subdivision plat provided shows only half of the proposed leach field in the "high infiltration area." Does this high infiltration strata extend below grade in the rest of the leach field area?
- 2. What is the level of groundwater in this area? I am a bit concerned because of the depth of the leach pipes.
- 3. We will need the following:
  - a. Vents for the leach field it will need these since it is so deep in the ground.
  - b. The field is inadequately sized for leach beds, the 5/7 application rate must be divided by 2/3. This is in the Uniform Plumbing code standards. Therefore, the field size must be 1550 square feet for a percolation rate of 16 minutes per inch (Note that there is a difference between a leach bed and a standard leach field (pipes in trenches)).

REVIEW OF PLANS & SPECS
MOUNTAINVIEW SUBDIVISION #2 SEPTIC TANK-DRAINFIELD
DECEMBER 19, 1979
PAGE TWO

4. Recommendation: I am a bit concerned with placement of the system under the parking lot. Mr. Chopping should be aware that heavy vehicles should not be driven over this area.

Burn Brown

WYOMING DEPARTMENT OF ENVIRORMENTAL QUALITY

WATER QUALITY DIVISION 933 MAIN STREET, LANDER, WYOMING, 82520.

(307) 332-3144

PROJECT: Mountainview Subdivision No. 2 Septic Tank - Drainfield

ENGINEER: Elmo G. Peterson, P. E.

Wind River Engineers

2333 Rose Lane

Riverton, WY 82501

OWNER:

Porter Chopping

Chopping Motor Lease, Inc.

1625 N. Highway 26 Riverton, WY 82501

WATER QUALITY DIVISION REFERENCE NUMBER: 79-39R

REVIEWING ENGINEER: Rick Engelmann

DATE OF REVIEW: November 9, 1979

ACTION: NOT AUTHORIZED.

CC INTS:

The subdivision site apparently has a real problem with tight soils. Because the percolation rate is so low (75 minutes per inch), we cannot approve subsurface disposal (standard trenches or seepage beds) for this site. As is noted on Page 8 of the U.S. Public Health Service Pub. 526 (see enclosed), soils with percolation rates of over sixty minutes per inch are not acceptable for standard absorption systems.

There are several possible options in this matter. One is to build an elevated leach field (also known as the mound system), or an evapotranspiration bed. Due to space considerations, the former may be more applicable to the site.

I have enclosed some draft regulations which may be of some use.



### REVIEW OF PLANS AND SPECIFICATIONS

### WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER QUALITY DIVISION 933 MAIN STREET, LANDER, WYOMING 82520

PROJECT: MOUNTAINVIEW SUBDIVISION #2 SEPTIC TANK-DRAINFIELD

OWNER: PORTER CHOPPING- CHOPPING MOTOR LEASE, INC. 1625 N. Hwy. 26, RIVERTON, WYO. 82501

ARCHITECT OR ENGINEER:

ELMO G. PETERSON, P.E.

WIND RIVER ENGINEERS

2333 ROSE LANE, RIVERTON, WYO. 82501

WATER QUALITY DIVISION REFERENCE NUMBER: 79-39

REVIEWING ENGINEER:

RICK ENGELMANN VC

DATE OF REVIEW:

JANUARY 29, 1979

ACTION:

NOT AUTHORIZED FOR CONSTRUCTION

### COMMENTS:

1. We do not permit parking areas, paved or otherwise, to be located over drainfields. The ground surface will seal, freezing of the field may occur, and it is possible for pipe to collapse.

- 2. We need the following information:
  - a. More complete installation spec.s for sewers (trenching, compaction in the zone above the pipe), manholes, and septic tank.
  - b. Percolation rates for the three new perc. holes. (We already have the numbers for perc. holes A-H).
  - c. Manufacturer's info. on the proposed septic tanks.

FH mailed 2/13/19

### PERMIT TO CONSTRUCT

/ <u>x</u> /	New			
//	Renewal		Permit No. 79-	-40
//	Modified			
<del></del>			#7 Subdivision	
	<del></del>	(Na	me of Facility)	
		This permit hereby a	uthorizes the applicar	nt:
		Casper Board of	Public Utilities	
		(Last)	(First)	(Middle)
		200 North David.		·
			(Street or P.O. Bo	ox)
		Casper	Natrona	Wyoming 82601
		(City)	(County)	(State)
to c	onstruct, i	istall, or modify a $\frac{Wa}{}$	ter Distribution & Sew	vage Collection
	lity locate	0:+ 04 0		
racı	Tity Tocates		(Legal Description	
in t	he County o	f Natrona		_, in the State of
Wyom	ing. This	permit shall be effect	live for a period of $\_$	2 years
from	the date o	f issuance of this per	mit not to exceed five	e (5) years.
AUTH	ORIZED BY:	•		
<u> </u>		nistrator lity Division	Hobert & Wyoming Dept. o	Director f Environmental Quality
		y 30, 1979 f Issuance		

"The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or insures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or operational requirements."

This permit <u>does not</u> supercede the requirements for obtaining a Septic Tank Permit from Natrona County Health Department.

PERMIT TO CONSTRUCT

miled 3/21/19

/ <u></u> /	New	J		
//	Renewa]		Permit No.	<b>£41</b>
<i></i> /	Modified			
·	•	Christiansen Di	amond Products, U.S.A.	
		(Na	me of Facility)	
	Th	is permit hereby a	uthorizes the applican	t:
		Larson Constru	uction Company	
		(Last)	(First)	(Middle)
		P. 0. Box 1527	7 (Street or P.O. Bo	<u> </u>
			•	
		Mills (City)	Natrona (County)	Wyoming 82644 (State)
<sub>కారి</sub> కో		, •	ommercial Subsurface Di	•
to [c	onstruct, insta			
faci	lity located in	Section 28,	(Legal Description)	)
in t	the County of	Natrona		, in the State of
Wyom	ning. This perm	nit shall be effect	ive for a period of	2 years
from	n the date of is	suance of this per	mit not to exceed five	2 (5) years.
AUTH	HORIZED BY:			•
<u>C</u>	Administ Water Quality		Hyoming Dept. or	Sunding Director F Environmental Quality
	March 13, 19 Date of Is			

"The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or insures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or operational requirements."

This permit <u>does not</u> supercede the requirements for obtaining a Septic Tank Permit from Natrona County Health Department.

FH maled 2/13/19

### PERMIT TO CONSTRUCT

/ <u>x</u> /	New	1	Permit No. 79-	42
//	Renewal			
//	Modified			
		Supup Pida	Placks 12 10	·
		(Name o	e - Blocks 13-19 of Facility)	*****
	Tł	nis permit hereby autho	orizes the applicant:	
		Town of Glenrock		
		(Last)	(First)	(Middle)
		Town Hall	•	
		10411	(Street or P.O. Box	)
		Clannack	Cawaaaa	
		Glenrock (City)	Converse (County)	Wyoming 82637 (State)
		ed in Section 3, T	ter Distribution & Sewa 33, R75 (Legal Description	
,			(2034, 2234, 19810))	,
in th	he County o	f <u>Converse</u>		, in the State of
Wyom:	ing. This	permit shall be effect	ive for a period of	years
from	the date o	f issuance of this per	mit not to exceed five	(5) years.
AUTHO	ORIZED BY:			•
				01
ر ب	Dious	P. Oala O	Dover 6	Sundin
		nistrator lity Division	Wyoming Dept. of	rector Environmental Quality
	•	-	g and appear of	
	January	/ 30, 1979		

<sup>&</sup>quot;The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or insures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or opertional requirements."

mailed 3/6/19

### PERMIT TO CONSTRUCT

/ <u>x</u> /	New			
/ <u></u> /	Renewal		Permit No. 79	9-43
	Modified			
-		Martin Clark -	Shop & Ofc. Building	
		(Nan	ne of Facility)	
	Tł	nis permit hereby au	uthorizes the applican	t:
		Clark	Martin.	
		(Last)	(First)	(Middle)
		P. O. Box 1325	(Street or P.O. Bo	
		,	•	
	•	Mills (City)	Natrona (County)	Wyoming 82644 (State)
		• •	mall Wastewater Facili	
				cy (commercial)
faci	lity located in	Ray Hoffman S	(Legal Description)	
in t	the County of _	Natrona		, in the State of
Wyom	ning. This perm	nit shall be effect	ive for a period of _	2 years
froπ	the date of is	ssuance of this perr	mit not to exceed five	e (5) years.
AUTH	ORIZED BY:			
			D.	& S
<u>L</u>	) Olimanis	1 X	Bovern Bent of	Director F Environmental Quality
	Water Quality	y wivesion	wyoming bept. of	Environmental quarrey
	Februarv	21, 1979		
	Date of I			

"The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or insures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or operational requirements."

This permit  $\underline{\text{does not}}$  supercede the requirements for obtaining a Septic Tank Permit from Natrona County Health Department.

79-44

ED HERSCHLER

## Department of Environmental Quality Water Quality Division

**933 MAIN** 

LANDER, WYOMING 82520

3144 TELEPHONE 307-332-304X

February 5, 1979.

Corbett/Associates Architects and Planners, P.O. Box 1009
Jackson, Wyoming, 83001

Attn: Robert W. Corbett

Dear Mr. Corbett:

Re: Water and Sewer System for Lot 328, Rafter
\_\_\_\_\_ J Subdivision

We have received in this office a plan of the above-said water and sewer system.

A review of your proposed plans cannot be made at this time.

The "Wyoming Water Quality Rules & Regulations, 1976, Chapter III" requires that all plans and specifications be signed or sealed by an engineer registered in the State of Wyoming. Your submission will not be reviewed until this is done.

Three copies of the plans and specifications are needed along with an "Application for Permit to Construct".

Please feel free to contact me if any question comes up.

Sincerely,

David W. Hill,

DISTRICT SUPERVISOR.

Davidle Hill

Enc. - Chapter III

3 Applications for Permit to Construct



ED HERSCHLER GOVERNOR

# Department of Environmental Quality Water Quality Division

30 EAST GRINNELL

SHERIDAN, WYOMING 82801 March 2, 1979 TELEPHONE 307-672-6488

Mr. Bill C. Burke P.O. Box 809 Newcastle, WY 82701

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Dear Mr. Burke:

This office has received your letter requesting approval of the water line/fire hydrant installation in your mobile home park, and the engineering drawing which accompanied the letter. I regret to say that this Division cannot, at this time, approve the installation. The following deficiencies exist:

- The water line has apparently been constructed without the issuance of a Permit to Construct from this Division. Such construction is a violation of State Law (W.S.35-11-301).
- 2) I have been in communication with Mr. Jim Fletcher, Newcastle City Engineer, on this matter and he has apprised me of the history and circumstances of this situation. It is generally against the policy of the Water Quality Division to allow construction of dead end water mains, particularly where such arrangements can be avoided. Therefore, the two water mains serving your mobile home park will have to be joined to form a loop before they will be approved. You should be informed, however, that no further construction on this water system is to take place without a Permit to Construct. This Division will take appropriate enforcement action under W.S.35-11-091 if any further unauthorized construction takes place.
- 3) Your drawing indicates that Class 160 PVC pipe was used in the water main. This Division does not routinely approve Class 160 pipe, unless the appropriate engineering analysis is supplied. The drawing also fails to supply other important

Mr. Bill C. Burke March 2, 1979

information, such as: specifications for valves, hydrants, thrust blocks, pipe bedding; method of pipeline disinfection; expected distribution pressure in the service area; and surrounding facilities. Without such information, the water line cannot be approved.

I am enclosing a copy of Chapter 3, Wyoming Water Quality Rules and Regulations, which describes the procedures for obtaining a Permit to Construct. I have also enclosed some blank application forms. If you have any questions on this, feel free to contact me.

Yours truly,

10m Pais

Tom Mueller District Engineer

TM/ls

cc: Mr. Jim Fletcher, Plains Engineering



# Department of Environmental Quality Water Quality Division

**933 MAIN** 

LANDER, WYOMING 82520

3144 TELEPHONE 307-332-2047

January 30, 1979.

Mr. Peter M. Jorgensen, P.O. Box 1142 Jackson, Wyo. 83001.

Attn: Stan Zaist

Dear Stan:

Re: MARBLETON WATER LINE EXTENSION 79-46

Dear Stan:

The "as built" water line extension appears to be satisfactory and appears to meet our minimum design standards.

I do have some questions and problems concerning the future extensions - shown on your plans as follows:-

- 1. If the town does wish to build these extensions in the near future, they should apply for a Permit to Construct by filling in and submitting the "Application for Permit to Construct".
- More valves are needed at the intersections between the existing system and the proposed extensions.

If any question comes up by either yourself or the town, please feel free to contact me.

Sincerely,

Fail W. Hill

David W. Hill, DISTRICT SUPERVISOR.

C.C. Town of Marbleton
P.O. Box 611, Big Piney, Wyo. 83113
Attn: Ralph Holladay

Enc. 2 "Applications for Permit to Construct to Town"

cc: John A. Proffit, P.E.
White Engineering & Surveying
P. O. Box 746
Evanston, WY 82930

### PERMIT TO CONSTRUCT

/ <u>X</u> /	New		Permit No	79-47RR	
/ <u>·</u>	Renewal				
//	Modified				
	<u> </u>	NTA COUNTY YOUT (Name	TH CAMP SEWAGE SY of Facility)	STEM .	
	īħis	permit hereby aut	horizes the applicar	nt:	
		Uinta County (Last)	Youth Camp (First)	)	(Middle)
		228 9th Stree	et .		
	•		(Street or P.O.	. Box)	
		Evanston, Wyo	oming 82930		
•		(City)	(County)		(State)
			septic tank - le 2 N., R. 117 W., (Legal Descrip	•	
in t	he County of _	Uinta		, in t	he State of
Wyom	ing. This per	mit shall be effe	ctive for a period o	of2	years
from	the date of i	ssuance of this pe	ermit not to exceed	five (5) year:	PROFESSION E. C.
AUTH	ORIZED BY:	SION WILLIAM L.  P.E. #	GARLAND ATT	5/	NO. 282
<u>U</u>	Okom d		14/9 1 1 1000000	Director	STATE OF WYOM
	Water Qualit	y D(v)sid ATE OF	WYOMIES Wyoming Dep	ot. of Environs	nental Quality

"The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or insures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or opertional requirements."

### REVIEW OF PLANS AND SPECIFICATIONS WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER QUALITY DIVISION 933 MAIN STREET, LANDER, WYOMING, 82520.

(307) 332-3144

PROJECT:

UINTA COUNTY YOUTH CAMP SEWAGE SYSTEM

SEC. 2, T.12N, R.117W.

UINTA COUNTY

ENGINEER:

JOHN A. PROFFIT, P.E.

UINTA ENGINEERING & SURVEYING

P.O. BOX 746

EVANSTON, WYO. 82430

OWNER:

UINTA COUNTY YOUTH CAMP

228 9TH ST.

EVANSTON, WYO. 82930

WATER QUALITY DIVISION REFERENCE NUMBER:

REVIEWING ENGINEER:

DATE OF REVIEW:

FEBRUARY 26, 1979

ACTION: NOT AUTHORIZED.

COMMENTS:

1) You indicate a depth of five feet to the seasonal high groundwater table. The bottom of the leach field must be at least four feet above the seasonal high groundwater table.

### R

### REVIEW OF PLANS AND SPECIFICATIONS

### WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER QUALITY DIVISION 933 MAIN STREET, LANDER, WYOMING, 82520.

(307) 332-3144

PROJECT: UINTA COUNTY YOUTH CAMP SEWAGE SYSTEM

SEC. 2. T.12N R117W UINTA

ENGINEER: JOHN A. PROFFIT, P.E. UINTA ENGINEERING & SURVEYING

P.O. BOX 746

EVANSTON, WYO. 82950

OWNER:

UINTA COUNTY YOUTH CAMP

228 9TH STREET

EVANSTON, WYO. 82930

WATER QUALITY DIVISION REFERENCE NUMBER:

79-47

REVIEWING ENGINEER: DAVID W. HILL

DATE OF REVIEW:

FEBRUARY 9, 1979

ACTION: NOT AUTHORIZED.

COMMENTS:

- 1. What is the depth to the seasonal high groundwater table in the leach field area?
- 2. What slope is used in the leach field?
- 3. How deep is the sewer-line buried? Especially across the access road.

mailed Victory

### PERMIT TO CONSTRUCT

/ <u></u> X/	New		Permit No	79–48R					
//	Renewal								
//	Modified								
	_		IVISION, CITY OF GI e of Facility)	LLETTE					
	Th	nis permit hereby au	thorizes the applic	cant:					
		Wayne Haug							
		(Last)	(Firs	(t)	Middle)				
		Box 2097							
	F.	· · · · · · · · · · · · · · · · · · ·	(Street or P.O. Box)						
	•	Gillette	Campbel1	Wyoming	82716				
		(City)	(County)		(State)				
faci	lity locate	ed inSection	21, T.50N., R.72W. (Legal Descr	iption)					
in t	he County c	of <u>Campb</u>	ell	, in the	e State of				
Wyom	ing. This	permit shall be eff	ective for a period	of two (2)	years				
from	the date c	of issuance of this	permit not to excee	d five (5) years					
cc:	Dove, Inc.	., Gillette, Wyoming	82716	:					
AUTH	ORIZED BY:			•					
<u> </u>		nistrator ality Division	Wyoming D	Director Dept. of Environme	ental Quality				
<u></u>	April 4.	1979 of Issuance	_						

<sup>&</sup>quot;The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or insures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or opertional requirements."

### REVIEW OF PLANS AND SPECIFICATIONS

### WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT:

-West Valley Subdivision - Gillette, Campbell County.

Wayne Haug

ARCHITECT OR ENGINEER:

Scott Engineering Co.

P.O. Box 2097

Gillette, WY 82716

WATER QUALITY DIVISION REFERENCE NUMBER:

79-48

REVIEWING ENGINEER:

Dan H. Kim, Tom Mueller

DATE OF REVIEW:

February 25, 1979

ACTION:

Not Authorized for Construction

#### COMMENTS:

- 1. A letter of verification from the City of Gillette is needed, indicating that the city can provide adequate water and sewer services to the subdivision.
- 2. It is not clear which lines are the proposed water and sewer lines and which lines are the existing pipes. Please clarify.
  - More information is also needed concerning the existing lines into which the proposed lines will be tied, including size, existing capacity of the pipe, etc.
- 3. Deflection tests should be performed on all flexible sewer pipe. The maximum deflection allowed should not exceed 5% of the pipes internal diameter (i.e., Go-No-Go deflection gauge).

### PERMIT TO CONSTRUCT

probedts 5.

/ <u>_x</u> / New		Perm	it No	79-49	<del></del>			
// Renewal		Ref:	78-586,	78-587,	78-588,	78-664	(as	built)
// Modified								
- Al-	HLAND URANIUM MINE (Name s permit hereby aut	of Facili	ty)		EMENT (PF	HASE II)		
1111.	s permits hereby aut	1101 12.63 611	c appire					
	Exxon Minerals	Co., Highla	nd Urani	um Operat	ions			
	(Last)		(First	:)	(1)	Middle)		
	P.O. Box 3020							
		(Stre	et or P.O	). Box)				
	<u>Casper</u> (City)		Converse (County)		<u> </u>	ning 826 (State)	02	
to construct, in	stall, or modify a	tailings p	ond evap	oration				
facility located	in Sections 22 a	nd 27, T.36	N., R.72	W				
·		(Leg	al Descri	(ption)				
in the County of	Conver	se			_, in the	e State	of	
Wyoming. This p	ermit shall be effe	ctive for	a period	of	two (2)	ye	ars	
Ref: 78-586, But 78-587, But 78-588 Fro	issuance of this p ffalo Shaft No. 1 E ffalo Shaft No. 2 E largement Tailings i kon Holding Pond No	vaporation vaporation Basin Reser	Reservoi:	r r	5) years.	-		
	istrator ity Division	- W	Love yoming De		Sur ector invironme	din ental Qu	 alit	y
March 5, 1 Date of	979 Issuance	•						

<sup>&</sup>quot;The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or insures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or opertional requirements."

### REVIEW OF PLANS AND SPECIFICATIONS

### WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER QUALITY DIVISION 933 MAIN STREET, LANDER, WYOMING 82520

replaced by 792/81

PROJECT:

MOBILE CORRALS

INDO-AMERICAN ENGINEERING ARCHITECT OR ENGINEER:

P.O. BOX 1813

ROCK SPRINGS, WYO. 82901

WATER QUALITY DIVISION REFERENCE NUMBER:

78-660 179-50

REVIEWING ENGINEER:

DOUG CRAIG

DATE OF REVIEW:

JANUARY 30, 1979

ACTION:

NOT AUTHORIZED TO CONSTRUCT

### COMMENTS:

- 1. Cleanouts or manholes are required at all terminal lines.
- Blowoff valves are required at all water line terminations.
- Gate valves should be provided at locations which allow isolations of no more than 25 units.
- Sewer profiles should be provided.
- Please provide cleanout details. 🐇
- Provide drawings and spec.s of blowoff valves.
- Indicate water line pressures. 7.
- Label all sewer line sizes. 8.
- Include hydrant details. 9.
- Provide detailed installation spec.s. 10.
- Provide detailed crossing spec.s. 11.
- Provide spec.s for water and sewer leakage tests. 12.
- Letter from city already provided. 13.
- Since this project is different from the original design which we have issued a permit for, submit a new application for a permit to construct. I have enclosed a blank form.



# Department of Environmental Quality Water Quality Division

933 MAIN

LANDER, WYOMING 82520

3144 TELEPHONE 307-332x30x1x

January 31, 1979.

Indo-American Engineering P.O. Box 1813 Rock Springs, Wyo. 82901.

Dear Dinesh: .

Here is a copy of the initial review I made on your re-submittal of Gosar Trailer Courts. Although we previously discussed the review, a written review is necessary.

If you should have further questions, do not hesitate to contact me.

Sincerely, ...

Doug Craig,

ENVIRONMENTAL ENGINEER.

DC/jky

Enc.